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WATERBORNE COMMERCE  
OF THE UNITED STATES

*Calendar Year* 1986

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PART 3  
WATERWAYS AND HARBORS  
GREAT LAKES



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<p>Waterborne Commerce of the United States (WCUS), Part 3, Calendar Year 1986 is one of a series of five publications containing statistics on the commercial movement of foreign and domestic cargo. WCUS, Part 3, presents detailed data by commodity and traffic for the waterways and harbors on the Great Lakes. The statistics include commodities given in short tons (2000 lbs.) and vessel trips for the harbors and waterways.</p> <p><i>Key words: Statistical data, traffic data, (K&amp;F)</i></p>					
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# WATERBORNE COMMERCE OF THE UNITED STATES

## CALENDAR YEAR 1986



### PART 3

### WATERWAYS AND HARBORS GREAT LAKES

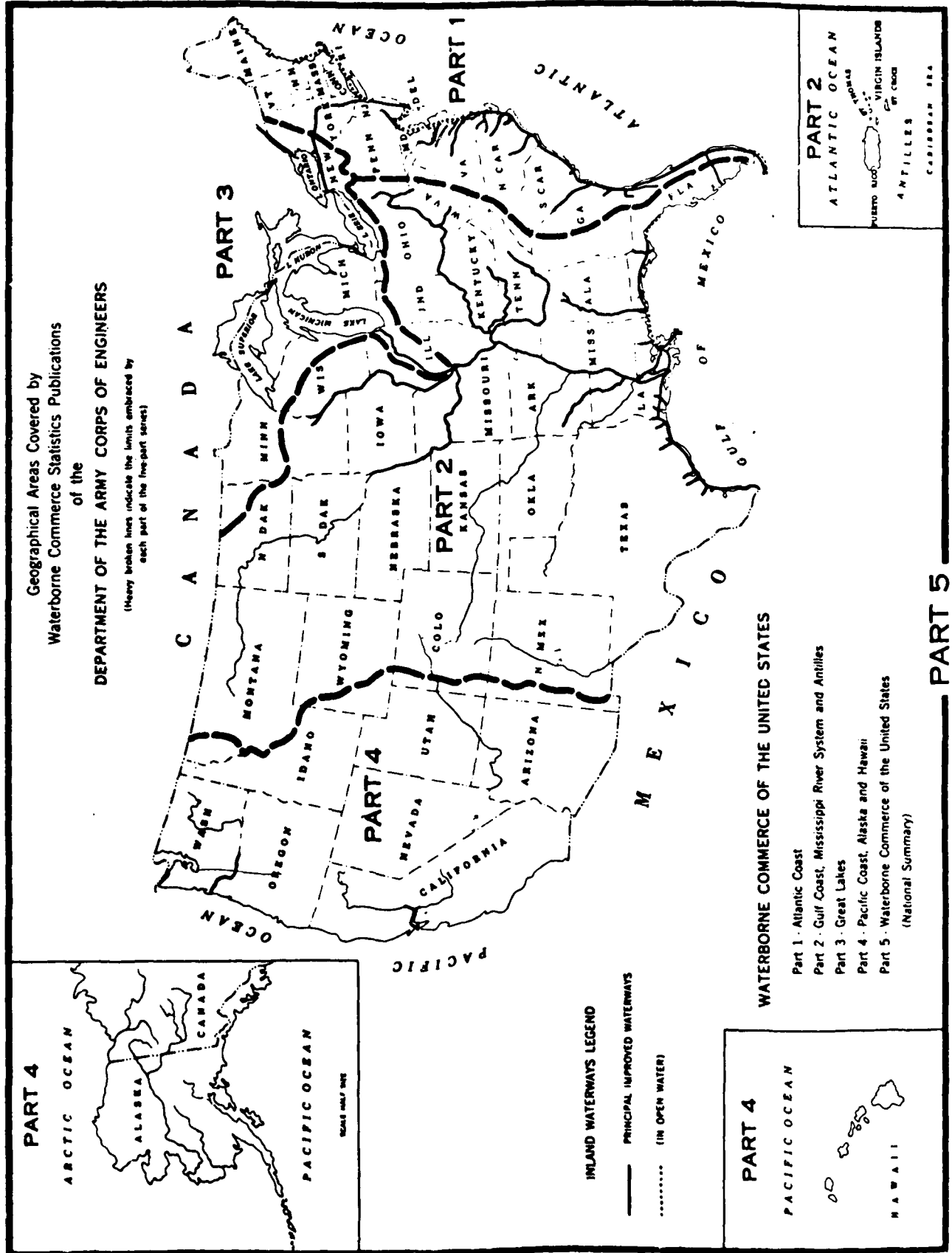
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## INTRODUCTION

This publication is one of a series containing statistics on the waterborne commerce of the United States during the calendar year 1986. Four of these publications present detailed data on the movements of commodities and vessels at the ports and harbors and on the waterways and canals of the United States, the Commonwealth of Puerto Rico, and the Virgin Islands, and the fifth contains summary data of the country as a whole. The numbers of the publications and the areas covered are:

Area

- Part 1. Atlantic Coast
- Part 2. Gulf Coast, Mississippi River System, and Antilles
- Part 3. Great Lakes
- Part 4. Pacific Coast, Alaska, and Hawaii
- Part 5. Waterborne Commerce of the United States (National Summaries)

Both the foreign and domestic commerce moved on United States waters are included. Data on the foreign commerce were supplied to the Corps of Engineers by the Bureau of the Census; data for the compilation of the domestic statistics were collected by the several offices of the Corps of Engineers, Department of the Army, in compliance with various acts of Congress. The principal provision governing the collection of these data is included in the River and Harbor Act of September 22, 1922:

Section 11. That owners, agents, masters, and clerks of vessels and other craft plying upon the navigable waters of the United States, and all individuals and corporations engaged in transporting their own goods upon the navigable waters of the United States, shall furnish such statements relative to vessels, passengers, freight and tonnage as may be required by the Secretary of War: Provided, that this provision shall not apply to those rafting logs, except upon a direct request upon the owner to furnish specific information.

That every person or persons offending against the provisions of this section, shall for each and every offense, be liable to a fine of \$100 or imprisonment not exceeding two months, to be enforced in any district court in the United States within whose territorial jurisdiction such offense may have been committed.

While the information as now collected and compiled is designed to meet the administrative requirements of the Department of the Army in connection with the duties assigned by Congress, it also provides useful data for other governmental departments, commercial and shipping concerns, and others interested in transportation.

Waterborne traffic movements were reported to the Corps of Engineers by all vessel operators of record on prescribed forms approved by the Office of Management and Budget under the Federal Reports Act of 1942 for those movements of their vessels which were classified as domestic traffic; namely, between United States ports, continental and noncontiguous, and on the island rivers, canals, and connecting channels of the United States, Puerto Rico, and the Virgin Islands, excluding the Panama Canal. The reports were generally submitted on the basis of a vessel movement completed in one direction and, for movements with cargo, the origin and destination of the water transportation of each individual commodity. In compiling the data, the entire movement was included in the year in which the movement was completed even though the shipment may have originated in the preceding year, except that, beginning with calendar year 1961 statistics, a cutoff date of 28 February was established for the processing of reports from vessel operators covering the prior year's completed movements. Hence, reports of movements completed in 1986 but not reported to the Corps of Engineers until after 28 February 1987 will be included in the next year's, 1987, statistics rather than in this publication, while reports of movements completed in 1985 but reported to the Corps after 28 February 1986 are included in this publication.

Sponsored by the Office of Statistical Policy, Office of Management and Budget, a uniform system of classification for freight was developed with cooperation of all Federal agencies engaged in collecting and compiling data on shipping. This classification, the Commodity Classification for Domestic Waterborne Commerce, is used for data on the foreign and domestic commerce presented in these publications, although some minor modifications exist in the foreign data which were necessitated by Bureau of the Census policies and procedures.

The domestic traffic includes all commercial movements between points in the United States, Puerto Rico, and the Virgin Islands. Traffic with the Panama Canal Zone is treated as foreign commerce. Cargo moved for the military agencies in commercial vessels is reported as ordinary commercial cargo; military cargo moved in Department of Defense vessels is omitted from these statistics.

All movements between the United States and foreign countries and between Puerto Rico and Virgin Islands, U.S.A., and foreign countries are classified as foreign traffic. Trade between United States territories and possessions, i.e. Guam, Wake, American Samoa, etc., and foreign countries is excluded.

These data are furnished to the Corps of Engineers by the Bureau of the Census under a working arrangement sponsored by the Office of Statistical Policy, Office of Management and Budget. The data are confined to movements by water, and are reconcilable with published reports of the Bureau of the Census. Shipments of domestic merchandise and re-exports of foreign merchandise are termed exports. The imports include inbound merchandise for direct consumption and entries into custom bonded storage and manufacturing warehouses. Intransit merchandise, defined by the Bureau of the Census as merchandise coming into the United States from a foreign country and shipped to a foreign country without having been entered as an import, is treated as an import when unloaded from a vessel and as an export when loaded on a vessel. Export shipments for use of the United States Armed Forces abroad are excluded from the statistics as are import shipments on Department of Defense owned and operated vessels. Foreign trade data of territories and possessions other than Puerto Rico and the Virgin Islands, which are under the jurisdiction of the Department of the Interior, were not furnished to the Corps of Engineers by the Bureau of the Census and are excluded from the statistics of both agencies.

Export shipments under the various foreign aid programs on Department of Defense operated vessels, either American Flag commercial vessels under time, voyage, or space charter or vessels owned and operated by the Department of Defense, and various items (listed by the Census) which affect national security are not published in terms of the individual commodities shipped. Instead, a lump-sum tonnage figure is compiled and appears in these tables as commodity code 9999, "Department of Defense Controlled Cargo and Special Category Items."

The 1986 statistics on waterborne exports of domestic and foreign merchandise and non-Department of Defense shipments of Special Category commodities reflect fully compiled data for shipments to Canada individually valued at \$2,000 and over combined with estimated data for shipments valued \$251-\$1,999, based on a 10-percent sample of such shipments. For countries other than Canada, the export statistics reflect fully compiled data for shipments valued \$1,000 and over combined with estimated data for shipments valued \$251-\$999, based on a 50-percent sample of such shipments. Data on export shipments valued under \$251 are excluded from this report.

Import statistics for 1986 exclude data on shipments valued \$250 and under reported on both formal and informal entries. Informal entries generally contain items valued not more than \$250.

Foreign trade data furnished by Census are based on reports processed for Census' monthly data January through December and represent statistical year rather than calendar year data.

# VIII

## Waterborne Commerce of the United States, 1986

The figures on ton-miles are computed by the Corps of Engineers; each ton-mile figure reflects only the distance each ton of cargo, foreign or domestic, moved on the waterway described in the section for which the figure is reported. The summary of ton-miles for the entire United States contained in Part 5 includes movements on the inland waterways and Great Lakes System only, cargoes, foreign and domestic, of deep-sea vessels are included only for that portion of the voyage that occurred in inland rivers, canals, or connecting channels—neither the carriage on the oceans nor the Gulf of Mexico nor the tonnage moved among the territories and possessions, "Intra-territory Traffic," is taken into account.

Trips of vessels at ports are reported as inbound, which represents the number of entrances or arrivals, and outbound, which represents the number of clearances or departures. On the waterways, the number of trips signifies the number of individual vessel movements on the waterway in each direction; a single trip is counted for each vessel using the waterway in a continuous direction regardless of the number of stops made on the waterway. Some towboat trips and empty barge moves are sampled to expedite processing and reduce cost. Even with sampling, however, the number of towboat trips are calculated from better than 70-percent of the total number of towboat moves reported and the number of barge trips are derived from better than 85-percent of the total number of barge moves reported. The number of trips reported includes vessels engaged in foreign trade, which are furnished by the Bureau of the Census based on Customs Entrance and Clearance forms. Complete information on trips of vessels, ferry and other, not required to clear formally was not furnished by the Bureau of Customs beginning with data for the year 1969. Adjustments are made to the trip counts, if necessary, to more accurately reflect actual traffic patterns (e.g. inbound vs. outbound trip counts).

Customs regulations with regard to entrance and clearance do not provide all data as required by the Corps of Engineers where supplementary information could be obtained, adjustments were made by the Corps of Engineers to reflect the true volume of vessel movements in and out of channels and harbors reported in these publications.

Excluding from these figures are United States Army and Navy vessels, such as Army transports and Navy tankers entering or clearing without commercial cargo, and foreign military and naval craft.

Some duplication may exist in the number of vessel trips at ports for those American flag vessels engaging both foreign and domestic trade on the same voyage. Since movements of vessels and cargo between two United States ports are reported to the Corps of Engineers, and entrance and clearance must be obtained from Customs at each port of call while foreign cargoes are aboard, those vessels engaged in combined foreign and domestic movements may be reported twice.

Draft, in all cases, is the distance from water level to the lowest point of the vessel under-water and is measured when the vessel is completely stopped—either tied to a dock or at anchor. The draft under way—while the vessel is moving—is dependent on many factors, such as speed of the vessel and depth and width of the channel, and varies from channel to channel. Channel depth of at least 3 feet more than the draft of a vessel at dock is required where vessels must be operated at slow speed. Channel depth of 5 feet more than the draft of a vessel at dock is required in channels where vessels can be operated at more efficient and economical speeds.

Passenger arrivals and departures on the various waterways and channels and at ports include passengers engaged in foreign travel. While the Immigration and Naturalization Service, Department of Justice, no longer provides foreign passenger data to the Waterborne Commerce Statistics Center, foreign passengers traveling between Canada and the United States in the Great Lakes and Alaska areas are reported to the Corps of Engineers from other sources available to the Corps. In addition, the New England Division has been able to obtain foreign passenger data for calendar year 1986 in Bar Harbor, Lubec, Eastport and Portland Harbor.

Foreign data on various connecting channels having no terminal facilities, such as Cape Cod Canal, and Chesapeake and Delaware Canal, are not available from Census records. Hence, the Corps of Engineers developed such data from canal records.

SECTION 1 of this publication presents comparative statements of commerce for preceding years and the detailed freight traffic for calendar year 1986 of harbors and waterways in the area covered by this part of the statistics series.

SECTION 2 presents data on the movements of vessels at the harbors and on the waterways included in the first section.

### TERMS FOR KIND OF TRAFFIC

The terms applied to the kinds of traffic as found in these publications are explained as follows:

#### Pertaining to Ports

**Imports and Exports.** These terms apply to traffic between the United States and foreign ports, including the Canal Zone. Traffic of the U.S. Great Lakes ports with Canada is supplemented by the term "Canadian" to differentiate it from overseas traffic.

**Coastwise Receipts and Shipments.** These terms apply to domestic traffic receiving a carriage over the ocean, or the Gulf of Mexico, e.g. New Orleans to Baltimore, New York to Puerto Rico, San Francisco to Hawaii, or Puerto Rico to Hawaii. Traffic between Great Lakes ports and seacoast ports, when having a carriage over the ocean, is also termed "coastwise." The Chesapeake Bay and Puget Sound are internal bodies of water, therefore, traffic confined to these areas in "internal" rather than "coastwise."

**Lake-wise Receipts and Shipments.** These terms apply to traffic between United States ports on the Great Lakes System. The Great Lakes System is treated as a separate system rather than as a part of the inland system.

**Internal Receipts and Shipments.** These terms apply to traffic between ports or landings wherein the entire movement takes place on inland waterways. Also termed internal are movements involving carriage on both inland waterways and waters of the Great Lakes; inland movements that cross short stretches of open waters which link inland systems; marine products, sand and gravel taken directly from beds of the oceans, the Gulf of Mexico and important areas thereof; and movements between offshore installations and inland waterways.

**Local.** Movements of freight within the confines of a port whether the port has only one or several areas or channels, except car-ferry and general ferry are termed "local." The term is also applied to marine products, sand, and gravel taken directly from the Great Lakes.

**Intraterritory receipts and shipments.** These terms apply to traffic between ports in Puerto Rico and the Virgin Islands, U.S.A., which are considered a single unit.

#### Pertaining to Rivers, Federal and Private Canals, Connecting Channels, and Intracoastal Waterways

The terms "imports," "exports," "coastwise receipts," "coastwise shipments," "internal receipts," and "internal shipments" are used as at ports.

**Upbound and Downbound.** These terms are applied to movements within the confines of a river, intracoastal waterway, canal, or a segment of one of these channels as described in the "Section included" for each channel.

**Inbound and Outbound.** Traffic moving from one waterway into another is termed "outbound" in the case of the shipping waterway and "inbound" with respect to the receiving waterway.

**Through Traffic.** Traffic moving through a waterway to and from points on other waterways is termed "through traffic."

#### General Terms

Freight reported under the terms "car ferry" or "general ferry" is not directly included in the port or channel tonnage, but is separately stated and tabulated.

## COMMODITY CLASSIFICATION FOR DOMESTIC WATERBORNE COMMERCE

NOTE: The commodity descriptions used in the statistical tables in this publication are abbreviated to conserve printing space of the following commodities:

Code No.	Item Name	Code No.	Item Name
Group 01-Farm Products		Group 20-Food and Kindred Products	
0101	Cotton, raw	2034	Vegetables and preparations, canned and otherwise prepared and preserved
0102	Barley and rye	2039	Fruits and fruit and vegetable juices, canned and otherwise prepared or preserved
0103	Corn	2041	Wheat flour and semolina
0104	Oats	2042	Animal feeds
0105	Rice	2049	Grain mill products, not elsewhere classified
0106	Sorghum Grains	2061	Sugar
0107	Wheat	2062	Molasses
0111	Soybeans	2081	Alcoholic beverages
0112	Flaxseed	2091	Vegetable oils, all grades, margarine and shortening
0119	Oilseeds, not elsewhere classified	2092	Animal oils and fats, not elsewhere classified, including marine
0121	Tobacco, leaf	2094	Groceries
0122	Hay and Fodder	2095	Ice
0129	Field crops, not elsewhere classified	2099	Miscellaneous food products
0131	Fresh fruits		
0132	Bananas and plantains	Group 21-Tobacco Products	
0133	Coffee, green and roasted (including instant)	2111	Tobacco manufactures
0134	Cocoa beans		
0141	Fresh and frozen vegetables	Group 22-Basic Textiles	
0151	Live animals (livestock) except zoo animals, cats, dogs, etc.	2211	Basic textile products, except textile fibers
0161	Animals and animal products, not elsewhere classified	2212	Textile fibers not elsewhere classified
0191	Miscellaneous farm products		
Group 08-Forest Products		Group 23-Apparel and Other Finished Textile Products Including Knit	
0841	Crude rubber and allied gums	2311	Apparel and other finished textile products, including knit
0861	Forest products, not elsewhere classified		
Group 09-Fresh Fish and Other Marine Products		Group 24-Lumber and Wood Products Except Furniture	
0911	Fresh fish, except shellfish	2411	Logs
0912	Shellfish, except prepared or preserved	2412	Rafted logs
0913	Menhaden	2413	Fuel wood, charcoal, and wastes
0931	Marine shells, unmanufactured	2414	Timber, posts, poles, piling, and other wood in the rough
Group 10-Metallic Ores		2415	Pulpwood, log
1011	Iron ore and concentrates	2416	Wood chips, staves, moldings, and excelsior
1021	Copper ore and concentrates	2421	Lumber
1051	Bauxite and other aluminum ores and concentrates	2431	Veneer, plywood, and other worked wood
1061	Manganese ores and concentrates	2491	Wood manufactures, not elsewhere classified
1091	Nonferrous metal ores and concentrates, not elsewhere classified		
Group 11-Coal		Group 25-Furniture and Fixtures	
1121	Coal and lignite	2511	Furniture and fixtures
Group 13-Crude Petroleum		Group 26-Pulp, Paper and Allied Products	
1311	Crude petroleum	2611	Pulp
Group 14-Nonmetallic Minerals, Except Fuels		2621	Standard newsprint paper
1411	Limestone flux and calcareous stone	2631	Paper and paperboard
1412	Building stone, unworked	2691	Pulp, paper and paperboard products, not elsewhere classified
1442	Sand, gravel and crushed rock		
1451	Clay, ceramic and refractory materials	Group 27-Printed Matter	
1471	Phosphate rock	2711	Printed matter
1479	Natural fertilizer materials, not elsewhere classified		
1491	Salt	Group 28-Chemicals and Allied Products	
1492	Sulphur, dry	2810	Sodium hydroxide (caustic soda)
1493	Sulphur, liquid	2811	Crude products from coal tar, petroleum, and natural gas, except benzene and toluene
1494	Gypsum, crude and plaster	2812	Dyes, organic pigment, dyeing and tanning materials
1499	Nonmetallic minerals, except fuels, not elsewhere classified	2813	Alcohols
Group 19-Ordinance and Accessories		2816	Radioactive and associated materials, including wastes
1911	Ordinance and accessories	2817	Benzene and toluene, crude and commercially pure
Group 20-Food and Kindred Products		2818	Sulphuric acid
2011	Meat, fresh, chilled, or frozen	2819	Basic chemicals and basic chemical products, not elsewhere classified
2012	Meat and meat products prepared or preserved, including canned meat products	2821	Plastic materials, regenerated cellulose and synthetic resins, including film, sheeting, and laminates
2014	Tallow, animal fats and oils	2822	Synthetic rubber
2015	Animal by-products, not elsewhere classified	2823	Synthetic (man-made) fiber
2021	Dairy products, except dried milk and cream	2831	Drugs (biological products, medicinal chemicals, botanical products and pharmaceutical preparations)
2022	Dried milk and cream	2841	Soap, detergents, and cleaning preparations; perfumes, cosmetics, and other toilet preparations
2031	Fish and fish products, including shellfish, prepared or preserved	2851	Paints, varnishes, lacquers, enamels, and allied products
		2861	Gum and wood chemicals
		2871	Nitrogenous chemical fertilizers, except mixtures
		2872	Potassic chemical fertilizers, except mixtures
		2873	Phosphatic chemical fertilizers, except mixtures

X

# Waterborne Commerce of the United States, 1986

Code No.	Item Name	Code No.	Item Name
Group 28-Chemicals and Allied Products		Group 34-Fabricated Metal Products, Except Ordnance, Machinery and Transportation Equipment	
2876	Insecticides, fungicides, pesticides, and disinfectants	3411	Fabricated metal products, except ordnance, machinery, and transportation equipment
2879	Fertilizers and fertilizer materials, not elsewhere classified	Group 35-Machinery, Except Electrical	
2891	Miscellaneous chemical products	3511	Machinery, except electrical
Group 29-Petroleum and Coal Products		Group 36-Electrical Machinery, Equipment and Supplies	
2911	Gasoline, including natural gasoline	3611	Electrical machinery equipment and supplies
2912	Jet fuel	Group 37-Transportation Equipment	
2913	Kerosene	3711	Motor vehicles, parts and equipment
2914	Distillate fuel oil	3721	Aircraft and parts
2915	Residual fuel oil	3731	Ships and boats
2916	Lubricating oils and greases	3791	Miscellaneous transportation equipment
2917	Naphtha, mineral spirits, solvents, not elsewhere classified	Group 38-Instruments, Photographic and Optical Goods, Watches and Clocks	
2918	Asphalt, tar, and pitches	3811	Instruments, photographic and optical goods, watches and clocks
2920	Coke, including petroleum coke	Group 39-Miscellaneous Products of Manufacturing	
2921	Liquefied petroleum gases, coal gases, natural gas, and natural gas liquids	3911	Miscellaneous products of manufacturing
2951	Asphalt building materials	Group 40-Waste and Scrap Materials	
2991	Petroleum and coal products, not elsewhere classified	4011	Iron and steel scrap
Group 30-Rubber and Miscellaneous Plastic Products		4012	Nonferrous metal scrap
3011	Rubber and miscellaneous plastic products	4022	Textile waste, scrap, and sweepings
Group 31-Leather and Leather Products		4024	Paper waste and scrap
3111	Leather and leather products	4029	Waste and scrap, not elsewhere classified
Group 32-Stone, Clay, Glass and Concrete Products		Group 41-Special Items	
3211	Glass and glass products	4111	Water
3241	Building cement	4112	Miscellaneous shipments not identifiable by commodity
3251	Structural clay products, including refractories	4113	LCL freight
3271	Lime	4118	Materials used in waterway improvement, Government materials
3281	Cut stone and stone products	4119	Empty containers
3291	Miscellaneous nonmetallic mineral products	9999*	Department of Defense controlled cargo and special category items
Group 33-Primary Metal Products		*Cargoes exported on Department of Defense controlled vessels (other than goods for the use of U.S. Armed Forces abroad) and non-Department of Defense shipments of military component items (abbreviated SCIs) for which commodity detail is not furnished to the Corps of Engineers.	
3311	Pig iron		
3312	Slag		
3313	Coke (coal and petroleum), petroleum pitches and asphalts, and naphtha and solvents		
3314	Iron and steel ingots, and other primary forms, including blanks for tube and pipe, and sponge iron		
3315	Iron and steel bars, rods, angles, shapes and sections, including sheet piling		
3316	Iron and steel plates and sheets		
3317	Iron and steel pipe and tube		
3318	Ferroalloys		
3319	Primary iron and steel products, not elsewhere classified including castings in the rough		
3321	Nonferrous metals primary smelter product, basic shapes, wire castings and forgings, except copper, lead, zinc and aluminum		
3322	Copper and copper alloys, whether or not refined, unworked		
3323	Lead and zinc including alloys, unworked		
3324	Aluminum and aluminum alloys, unworked		

TABLE 1 - TON-MILEAGE OF UNITED STATES FREIGHT CARRIED ON THE GREAT LAKES BY AREA, CALENDAR YEAR 1986  
(1000 OMITTED)

AREA	FOREIGN						DOMESTIC					
	OVERSEAS			CANADIAN			COASTWISE		LAKewise		INTERNAL	
	RECEIPTS AND SHIPMENTS	THROUGH SHIPMENTS	THROUGH SHIPMENTS	RECEIPTS AND SHIPMENTS	THROUGH SHIPMENTS	THROUGH SHIPMENTS	RECEIPTS AND SHIPMENTS	THROUGH SHIPMENTS	RECEIPTS AND SHIPMENTS	THROUGH SHIPMENTS	RECEIPTS AND SHIPMENTS	LOCAL
LAKE SUPERIOR	17,134,310	1,120,930	-----	2,000,500	-----	-----	-----	13,936,571	-----	-----	-----	301
ST. MARYS RIVER	3,036,099	2	185,351	5,900	315,204	-----	-----	16,622	2,512,940	-----	-----	-----
LAKE MICHIGAN INCLUDING THE POINT OF CHICAGO (CHICAGO HARBOR, NORTH BRANCH, SOUTH BRANCH, SANITARY SHIP CANAL, CALUMET-SAS CHANNEL, LAKE CALUMET AND CALUMET HARBOR AND RIVER)	11,950,448	900,899	-----	1,550,556	-----	-----	-----	9,220,720	10,059	292,508	111,409	64,280
LAKE HURON	15,125,494	4,405	1,352,391	596,614	2,141,540	-----	-----	2,603,043	8,426,317	-----	-----	360
ST. CLAIR RIVER, INCLUDING CHANNELS IN LAKE ST. CLAIR	5,167,808	802	332,633	2,490	642,370	-----	-----	155,593	2,036,008	-----	-----	56
DETOIT RIVER	1,620,088	57,221	181,132	17,796	362,895	-----	-----	172,076	857,765	-----	-----	3
LAKE ERIE, INCLUDING UPPER NIAGARA RIVER	10,136,297	625,911	1,676,023	5,480,082	1,121,467	-----	-----	3,210,141	4,862	-----	-----	4,911
WELAND CANAL	680,353	-----	295,693	204	381,017	-----	-----	-----	3,439	-----	-----	-----
LAKE ONTARIO, INCLUDING LOWER NIAGARA RIVER	3,109,563	1,348	1,752,252	519,003	1,016,810	-----	-----	2,101	17,994	65	-----	-----
ST. LAWRENCE RIVER, BETWEEN INTERNATIONAL BOUNDARY LINE AND LAKE ONTARIO	1,942,073	250	1,229,629	2	705,404	-----	-----	6,748	-----	-----	-----	-----
TOTAL	67,908,541	2,699,366	7,007,904	7,681,963	6,466,039	-----	-----	29,332,420	13,067,924	292,573	111,409	69,439

TABLE 2 - FREIGHT TONS OF UNITED STATES TRAFFIC CARRIED ON THE GREAT LAKES BY AREA, CALENDAR YEAR 1986  
(SHORT TONS)

AREA	AREA TOTALS	FOREIGN						DOMESTIC					
		OVERSEAS		CANADIAN		COASTWISE		LAKEWISE		INTERNAL		LOCAL	
		RECEIPTS AND SHIPMENTS	THROUGH	RECEIPTS AND SHIPMENTS	THROUGH	RECEIPTS AND SHIPMENTS	THROUGH	RECEIPTS AND SHIPMENTS	THROUGH	RECEIPTS AND SHIPMENTS	THROUGH	RECEIPTS AND SHIPMENTS	THROUGH
LAKE SUPERIOR	50,782,757	2,982,087		7,542,146				40,155,987				142,517	
ST. MARYS RIVER	51,332,677	52	2,982,087	247,637	6,749,810			1,165,152	39,887,935				
LAKE MICHIGAN INCLUDING THE PORT OF CHICAGO (CHICAGO MARSH, NORTH BRANCH, SOUTH BRANCH, SANITARY SHIP CANAL, CALUMET-RAS CHANDEL, LAKE CALUMET AND CALUMET MARSH AND RIVER)	73,899,210	2,886,348		4,521,072				47,482,579				2,430,969	
LAKE HURON	98,836,622	27,178	5,408,483	4,411,877	9,540,408			20,482,688	44,168,223			1,989	
ST. CLAIR RIVER, INCLUDING CHANNEL IN LAKE ST. CLAIR	65,869,529	7,316	5,855,461	90,901	14,107,598			9,651,044	35,685,058	1,989			
DETROIT RIVER	81,733,266	1,753,504	5,982,977	1,284,576	13,080,570			12,046,330	27,649,850			3,451	
LAKE ERIE, INCLUDING UPPER NIAGARA RIVER	85,872,876	3,455,032	7,506,485	25,675,534	5,078,513			43,694,991	22,000			454,061	
NELSON CANAL	26,224,465		10,951,577	1,036,193	14,111,734				127,361				
LAKE ONTARIO, INCLUDING LOWER NIAGARA RIVER	26,405,840	27,253	10,951,577	4,879,414	6,455,065			14,889	112,462	65,166			
ST. LAWRENCE RIVER, BETWEEN INTERNATIONAL BOUNDARY LINE AND LAKE ONTARIO	17,467,504	4,944	10,978,430	72,559	6,236,609			117,462					
NET UNITED STATES TRAFFIC ON THE GREAT LAKES	137,918,051	13,982,488		31,986,879				97,384,054		81,865,772		3,035,863	

\*EXCLUDES TRAFFIC WHICH DID NOT TRAVERSE THE GREAT LAKES.

# Waterborne Commerce of the United States, 1986

XIII

TABLE 3 - NET SUMMARY OF FOREIGN AND DOMESTIC FREIGHT CARRIED ON THE GREAT LAKES, BY TYPE OF TRAFFIC AND COMMODITY

COMPARATIVE STATEMENT OF TRAFFIC			
YEAR	SHORT TONS	YEAR	SHORT TONS
1977	185,906,340	1982	127,388,710
1978	221,374,800	1983	138,217,894
1979	220,980,071	1984	162,799,230
1980	181,514,065	1985	148,147,122
1981	148,147,122	1986	137,918,051

## FREIGHT TRAFFIC, 1986

COMMODITY	TOTAL	(NET TRAFFIC IN TONS OF 2,000 POUNDS)				DOMESTIC			
		FOREIGN		EXPORTS		COASTWISE	LAKEWISE	INTERNAL	LOCAL
		CANADIAN	OVERSEAS	CANADIAN	OVERSEAS				
TOTAL, ALL COMMODITIES	157,918,051	9,597,544	4,244,940	25,248,184	6,738,734		87,384,058	1,665,772	3,038,863
0102 BARLEY AND RYE	340,072			144,114	239,958				
0103 BARS	965,944			628,573	302,353			31,790	3,224
0104 BATS	24,074	24,074							
0107 AMBER	3,348,202	121,758		317,385	2,131,181		757,414	18,464	
0111 STEEL	1,162,793			214,722	1,073,162			54,909	
0119 CEREALS, NEC	272,620	1,483			771,077				
0124 FIELD CROPS, NEC	11,287	90			11,100				
0131 FRESH FRUITS	429			125					
0133 CORN	112		112						
0141 FRESH AND FROZEN VEGETABLES	36,171			803	29,797		5,542		
0161 ANIMALS AND PRODUCTS, NEC	391	58		317	16				
0191 MISCELLANEOUS FARM PRODUCTS	25							23	
0241 CRUDE RUBBER AND ALLIED GUMS	150	31	105		14				
0242 FURBER PRODUCTS, NEC	171	22	150						
0251 FRESH FISH, EXCEPT SHELLFISH	1,261		5	339			209		708
0252 MARINE SHELLS, UNMANUFACTURED	11,894							11,894	
0253 IRON ORE AND CONCENTRATES	49,714,974	3,346,061	485,152	4,976,893	21,067		40,743,119	62,682	
0254 ALUMINUM ORES, CONCENTRATES	70,984		70,984		34				
0255 MANGANESE ORES, CONCENTRATES	24,057		24,057						
0256 NONFERROUS ORES, CONCENT, NEC	154,189	7	70,227		83,955				
0301 COAL AND LIGNITE	34,008,605			13,883,447	393,211		19,796,537	6,152	19,163
0302 CRUDE PETROLEUM	50,766	54,766							
0401 LIME	19,910,860			2,611,280			17,296,000		3,971
0402 CRACKING STONE, UNKNOW	25,760			25,760					
0403 SAND, GRAVEL, CRUSHED ROCK	3,936,565	1,079,004	4	409,111	50,635		511,715	9,035	1,877,061
0404 CLAY	289,626		10,867	116,068	52,815		109,875		
0405 SALT	2,338,362	1,556,975	13	741,076	40,298				
0406 SULPHUR, ORE	260			260					
0407 GYPSUM, CRUDE AND PLASTER	1,124,567			65,652	20		1,058,895		
0408 NONMETALLIC MINERALS, NEC	1,221,817	87,535	57,840	20,110	5,004		987,841	7,737	60,750
0501 CRANES AND ACCESSORIES	167	119	48						
0511 MEAT, FRESH, CHILLED, FROZEN	415		122		42		251		
0512 MEAT AND PRODUCTS, NEC	95	46	10		39				
0514 TALLOW, ANIMAL FATS AND OILS	35,349			86	35,263				
0515 ANIMAL BY-PRODUCTS, NEC	2,298	165	20	395	1,718				
0521 DAIRY PRODUCTS, NEC	4,090		69		724		4,195		
0522 DRIED MILK AND CREAM	40,698				40,698				
0531 FISH AND SHELLFISH, PREPARED	39,392		32				39,360		
0534 VEGETABLES AND PROD, NEC	2,573	523	414		20		1,616		
0535 PREP FRUIT AND VEG JUICE, NEC	4,279	2,649	1,030						
0541 WHEAT FLOUR AND SEMOLINA	35,041				35,041				
0542 ANIMAL FEEDS	17,745	137	387		14,310		2,911		
0543 GRAIN MILL PRODUCTS, NEC	130,769	361	327		130,081				
0544 SUGAR	11,602	2,756	8,446						
0545 ALCOHOLIC BEVERAGES	9,545	3,047	6,402	10	65				21
0546 VEGETABLE OILS, MARG, SHORT	20,382		1,731		18,651				
0547 ANIMAL OILS AND FATS, NEC	73		73						
0548 SPICES	312						284		28
0549 ICE	324		257				69		
0549 MISCELLANEOUS FOOD PRODUCTS	40,649	163	1,662		34,879		1,770		15
0601 TRUCKED MANUFACTURES	26		26						
0611 BASIC TEXTILE PRODUCTS	16,356	270	16,027	2	57				
0612 APPAREL	1,156	17	135		1,004				
0613 LIDS	8,234			4,548	1,494		44		2,130
0614 FUEL, WOOD, CHARCOAL, WASTES	23				20		3		
0615 RUBBERS, LUBRICANTS	2,971						2,971		
0616 ROPE, CHAINS, STAPLES, HOLDINGS	22		22						
0621 LUMBER	31,202	23,965	112	1,940	1,324		3,820		41
0622 VENEER, PLYWOOD, WORKED WOOD	12,672	580	139	244	1,839		2,075	7,795	
0623 WOOD MANUFACTURES, NEC	6,687	29	104	48	14		6,492		
0624 FURNITURE AND FIXTURES	2,125	319	1,780				26		
0625 PULP	174,390	51,521	103,427	65	584		18,333		
0626 STANDARD NEWSPRINT PAPER	180,238	134,475					5,763		
0627 PAPER AND PAPERBOARD	108,985	1,022	2,269	517	380		102,077	2,720	
0628 PULP AND PAPER PRODUCTS, NEC	623	212	270	14	127				
0629 PRINTED MATTER	485	37	246	133	69				
0630 SODIUM HYDROXIDE	18,956						14,918		4,038
0631 CRUDE TAR, OIL, GAS PRODUCTS	62,998	53,035	452					29,511	
0632 DYES, PIGMENT, TANNING MATS	10				10				
0633 ALCOHOLS	72,021	25,464	568		935		37,857	7,197	
0634 BENZENE AND TOLUENE	156,446	33,310		13,508			30,180	36,647	42,805
0635 BASIC CHEMICALS AND PROD, NEC	365,839	43,046	18,719	40,860	4,232		114,651	2,906	141,825
0636 PLASTIC MATERIALS	4,394	1,017	2,077	51	1,293				
0637 SYNTHETIC RUBBER	2,583	2	100	4	170		2,307		
0638 SYNTHETIC (MAN-MADE) FIBERS	20	18			2				
0639 DRUGS	850	393	409		48				
0640 SOAP	4,194	163	379	13	3,639				
0641 PAINTS	29,002	7,183	21,779		40				
0642 GUM AND WOOD CHEMICALS	1,424		87		19		1,810		
0643 NITROGENOUS CHEM FERTILIZERS	432,086	38,871	176,133				54,511	162,571	

TABLE 3 - NET SUMMARY OF FOREIGN AND DOMESTIC FREIGHT CARRIED ON THE GREAT LAKES, BY TYPE OF TRAFFIC AND COMMODITY (CONTINUED)

FREIGHT TRAFFIC, 1986 (CONTINUED)

(NET TRAFFIC IN TONS OF 2,000 POUNDS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC			
		IMPORTS		EXPORTS		COASTWISE	LAKEWISE	INTERNAL	LOCAL
		CANADIAN	OVERSEAS	CANADIAN	OVERSEAS				
2872 POTASSIUM CHEM FERTILIZERS-----	1,115,768	1,110,251	-----	-----	-----	-----	5,517	-----	-----
2873 PHOSPHATIC CHEM FERTILIZERS----	13,109	-----	-----	-----	88	-----	AA	12,933	-----
2876 INSECTICIDES, DISINFECTANTS-----	1,310	215	60A	110	383	-----	-----	-----	-----
2879 FERTILIZER AND MATERIALS, NEC-----	78,100	25,924	29,865	-----	22	-----	-----	22,293	-----
2891 MISCELLANEOUS CHEMICAL PROD-----	9,514	2,030	2,454	41	1,072	-----	3,417	-----	-----
2911 GASOLINE-----	864,384	113,451	29	6,875	-----	-----	632,611	91,030	20,384
2912 JET FUEL-----	213,810	-----	-----	6,621	-----	-----	189,256	2,389	15,544
2913 KEROSENE-----	14,139	-----	-----	-----	-----	-----	10,559	-----	3,580
2914 DISTILLATE FUEL OIL-----	808,044	150,751	-----	20,808	-----	-----	349,201	-----	247,229
2915 RESIDUAL FUEL OIL-----	820,838	257,092	31,058	6A4	-----	-----	364,919	-----	167,105
2916 LUBRICATING OILS AND GREASES-----	149,827	819	7	48,021	9	-----	32,200	67,371	1,400
2917 NAPHTHA, PETROLEUM SOLVENTS-----	108,949	31,693	-----	-----	26	-----	13,836	-----	63,394
2918 ASPHALT, TAR, AND BITUMENS-----	793,068	35,289	23	35,019	-----	-----	472,030	46,300	204,394
2920 COKE, PETROLEUM COKE-----	1,509,342	67,226	-----	864,140	343,85A	-----	114,900	90,838	24,302
2921 LIQUEFIED GASES-----	3,670	-----	-----	3,000	-----	-----	666	-----	0
2951 ASPHALT BUILDING MATERIALS-----	326	-----	-----	326	-----	-----	-----	-----	-----
2991 PETROLEUM AND COAL PROD, NEC-----	3,415	20	36	-----	10	-----	-----	-----	3,349
3011 RUBBER AND MISC PLASTIC PROD-----	14,176	508	3,889	54	270	-----	9,455	-----	-----
3111 LEATHER AND LEATHER PRODUCTS-----	436	65	367	-----	4	-----	-----	-----	-----
3211 GLASS AND GLASS PRODUCTS-----	1,769	545	1,098	9	117	-----	-----	-----	-----
3241 BUILDING CEMENT-----	3,823,428	860,685	20,03A	22,339	-----	-----	2,855,200	65,16A	-----
3251 STRUCTURAL CLAY PRODUCTS-----	50,667	2,010	4,867	-----	-----	-----	43,790	-----	-----
3271 LIME-----	1,608	-----	-----	-----	-----	-----	1,608	-----	-----
3281 CUT STONE AND STONE PRODUCTS-----	3,309	945	1,726	21	22	-----	545	-----	-----
3291 MISC NONMETALLIC MINERAL PROD-----	1,524	211	739	4	51	-----	519	-----	-----
3311 PIG IRON-----	94,451	85,268	-----	-----	-----	-----	940	8,223	-----
3312 SLAG-----	610,815	20,095	-----	-----	-----	-----	424,856	145,864	-----
3314 IRON AND STEEL PRIMARY FORMS-----	587,713	42	38A,43A	-----	15,56A	-----	1,000	142,647	-----
3315 IRON, STEEL SHAPES, EXC SHEET-----	2,467,724	28,045	2,306,298	-----	6,727	-----	14,677	131,936	-----
3316 IRON AND STEEL PLATES, SHEETS-----	110,493	-----	16,590	-----	27,324	-----	3,692	67,887	-----
3317 IRON AND STEEL PIPE AND TUB-----	36,119	12	32,771	-----	41A	-----	-----	2,912	-----
3318 FERROALLOYS-----	101,301	31,540	37,853	-----	-----	-----	1,400	30,70A	-----
3319 IRON AND STEEL PRODUCTS, NEC-----	75,387	1,849	4,076	2,149	7,449	-----	2,793	54,039	552
3321 NONFERROUS METALS, NEC-----	4,818	1,351	3,436	9	22	-----	-----	-----	-----
3322 COPPER ALLOYS, UNWORKED-----	1,109	253	822	-----	34	-----	-----	-----	-----
3323 LEAD AND ZINC, UNWORKED-----	107,690	350	107,337	3	-----	-----	-----	-----	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	14,191	7,826	7,342	-----	23	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS-----	40,302	7,380	18,510	69	498	-----	1,058	12,787	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	97,925	4,742	77,379	779	12,10A	-----	2,439	480	-----
3611 ELECTRICAL MACH AND EQUIP-----	6,309	660	3,41A	54	2,177	-----	-----	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	14,930	7,256	5,165	178	2,021	-----	310	-----	-----
3731 SHIPS AND BOATS-----	442	12	188	7	235	-----	-----	-----	-----
3791 MISC TRANSPORTATION EQUIPMENT-----	1,028	2	415	6	47	-----	558	-----	-----
3811 INSTR, TIME, PHOTO, OPT GOODS-----	1,824	320	372	143	989	-----	-----	-----	-----
3911 MISC MANUFACTURED PRODUCTS-----	3,375	95	921	-----	1A	-----	2,343	-----	-----
4011 IRON AND STEEL SCRAP-----	1,458,043	136	859	1A,141	1,274,701	-----	4,667	153,823	4,11A
4012 NONFERROUS METAL SCRAP-----	53,934	1,678	51,453	97	706	-----	-----	-----	-----
4022 TEXTILE WASTE, SCRAP, SHEEP-----	27	-----	-----	10	17	-----	-----	-----	-----
4024 PAPER WASTE AND SCRAP-----	47	-----	-----	47	-----	-----	-----	-----	-----
4029 WASTE AND SCRAP, NEC-----	3,033	-----	-----	-----	-----	-----	61	2,972	-----
4112 COMMODITIES, NEC-----	37,074	1,682	1,173	12A	1,195	-----	32,881	-----	15
4118 WATERWAY IMPROVEMENT MAT-----	121,328	-----	-----	-----	-----	-----	31,529	-----	89,799
9999 DEPARTMENT OF DEFENSE AND SCI-----	3,684	-----	-----	-----	3,684	-----	-----	-----	-----

\* SALT INCLUDED IN NONMETALLIC MINERALS, NEC, TO AVOID DISCLOSURE OF INDIVIDUAL COMPANY OPERATIONS.

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**SECTION 1**

**FREIGHT TRAFFIC**

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# ST. PAUL, MN, DISTRICT (GREAT LAKES PORTION) LAKE SUPERIOR AREA

3

FAIR HARBORS (LAKE HAV), MINN.

SECTION INCLUDES LAKE HAV, CONTROLLING DEPTH 28 FEET EXCEPT FOR A 26 FOOT AREA ALONG THE EAST PROJECT LINE. PROJECT DEPTH 25 FEET IN LAKE HAV, AND 34 FEET NEAR FATHOM. NAVIGATION SEASONS: MARCH 3 TO SHUTTED ALL WINTER LONG.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	3,645,603	1982	5,059,948
1978	10,517,263	1983	9,054,999
1979	11,932,715	1984	7,676,523
1980	11,157,604	1985	9,631,235
1981	11,332,237	1986	6,608,616

## FREIGHT TRAFFIC, 1986

### DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE SHIPMENTS	LOCAL
ALL FREIGHT, EXCEPT SHELLFISH	6,608,616	6,608,616	3
ALL FREIGHT AND SHELLFISH	6,608,616	6,608,616	3

## DULUTH-SUPERIOR HARBOR, MINN. AND WIS.

SECTION INCLUDES SUPERIOR HAV AND ITS TWENTY-FOUR, ST. LOUIS HAV AND ST. LOUIS RIVER, AND ALLOUEZ HAV. CONTROLLING DEPTH: 32 FEET IN LAKE APPROACHES, DIMINISHING TO A MINIMUM OF 20 FEET IN CERTAIN INNER CHANNELS; THERE ARE NUMEROUS 1-2 FOOT SHOALS SCATTERED IN PORTIONS OF THE DULUTH AND SUPERIOR HARBOR BASINS. PROJECT DEPTH: 32 FEET IN LAKE APPROACHES, 27 FEET IN DULUTH AND SUPERIOR HARBOR BASINS, SUPERIOR FRONT CHANNEL, AND IN OPEN-CHANNEL ROUTES THROUGH NORTH AND SOUTH CHANNELS TO D. M. & T. M. R.V. JRE DEPTH: 27 FEET IN SUPERIOR HAV AND ALLOUEZ HAV; 25 FEET IN REMAINING PORTION OF SOUTH, UPPER, AND MINNESOTA CHANNELS TO HALLET DOCK NO. 31 AND 25 FEET FROM TAIL TO NORTHERLY END OF CLOUGH ISLAND. NAVIGATION SEASONS: APRIL 3 TO JANUARY 11.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	33,419,210	204,514	1982	27,436,085	208,844
1978	45,641,384	231,824	1983	30,094,174	176,004
1979	47,725,075	198,050	1984	37,255,901	212,732
1980	31,434,568	233,090	1985	28,416,401	196,000
1981	39,425,503	244,550	1986	29,155,300	215,150

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC		
		OVERSEAS		CANADIAN		LAKEWISE		LOCAL
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	
TOTAL	29,155,300	59,196	2,842,871	434,084	2,506,176	1,328,809	21,805,501	158,659
102 BARLEY AND WHEAT	394,072		239,958		194,114			
1104 BATS	10,156			10,156				
1107 WHEAT	2,651,129		1,940,245		133,480		757,414	
1111 STEEL	10,636		10,636					
1119 STEEL	272,070		271,077		1,543			
1123 FUEL OIL	11,177		11,087		90			
1133 FUEL	112		112					
1141 FRESH AND FROZEN VEGETABLES	26,141		26,140					
1141 FRESH FISH, EXCEPT SHELLFISH	116							116
1151 IRON ORE AND CONCENTRATES	14,970,172		21,047		2,094,829		12,850,276	
1091 NONFERROUS ORES, CONCENT, NEC	83,955		83,955					
1121 COAL AND LIGNITE	8,342,767					155,006	6,147,761	
1411 LIMESTONE	844,545					844,545		
1402 SAND, GRAVEL, CRUSHED ROCK	107,200							107,200
1451 CLAY	82,412		2,808		80,004			
1471 NONMETALLIC MINERALS, NEC	85,559			49,255		36,304		
2022 TOILET MILK AND CREAM	3,048		3,048					
2031 FISH AND SHELLFISH, PREPARED	2	2						
2042 ANIMAL FEEDS	137				137			
2049 SWAIN HILL PRODUCTS, NEC	76,433		76,649		284			
2091 ALCOHOLIC BEVERAGES	26	26						
2099 MISCELLANEOUS FOOD PRODUCTS	10,777	13	10,774					
2211 BASIC TEXTILE PRODUCTS	5,077	5,077						
2411 LUMBER	450		450					
2413 FUEL OIL, CHANCIAL, PASTES	20		20					
2421 LUMBER	1,361			1,361				
2611 PULP	51,521			51,521				
2621 STANDARD NEWSPRINT PAPER	127,461			127,461				
2631 PAPER AND PAPERBOARD	411							
2691 PULP AND PAPER PRODUCTS, NEC	14				14			
2819 BASIC CHEMICALS AND PROD, NEC	18		18					
2911 GASOLINE	8,511					8,511		
2914 DISTILLATE FUEL OIL	27,084					9,097		14,887
2915 RESIDUAL FUEL OIL	20,640			4,184				16,456

# Waterborne Commerce of the United States, 1986

PORTS OF CALL--SUPERIOR HARBOR, MINN., AND AIS--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	OVERSEAS		PORT OF CALL		DIRECT		LOCAL
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	IMPORTS	EXPORTS	
2920 COKE, PETROLEUM COKE-----	211,614		133,862		43,823	33,334		
3011 RUBBER AND MISC PLASTIC PROD-----	11	11						
3241 BUILDING CEMENT-----	436,181			167,645		268,426	10,050	
3251 STRUTTING PLATE PRODUCTS-----	27	27						
3281 CEMENT STONE AND STONE PRODUCTS-----	95	95						
3312 GLASS-----	3,545					3,545		
3315 IRON, STEEL SHAPES, ETC SHEET-----	51,493	51,493						
3316 IRON AND STEEL PLATES, SHEETS-----	1,552	1,552						
3317 IRON AND STEEL PIPE AND TUBE-----	84	84						
3411 FABRICATED METAL PRODUCTS-----	247	89	158					
3511 MACHINERY, EXCEPT ELECTRICAL-----	149	147	2					
3611 ELECTRIC MACH AND ELECTRICAL-----	42	42						
3811 IRON AND STEEL SCRAP-----	36,146		1,465		34,681			
4112 COMMUNICATIONS-----	13		7					

## ST. PAUL, MN, DISTRICT (GREAT LAKES PORTION)

5

OTHER GROUPS AND WATERWAYS

HARBOR OR WATERWAY	COMMODITY	TONS	PASSENGERS
PROJECT			
ASHLAND HARBOR, WIS.	1011 IRON ORE AND CONCENTRATES-----	45	-----
	1121 COAL AND LIGNITE-----	130,570	-----
	1402 SAND, GRAVEL, CRUSHED ROCK-----	2,970	-----
	2411 LUMBS-----	44	-----
	2419 BASIC CHEMICALS AND PRIM, SEC-----	20	-----
	4201 MISC NONMETALLIC MINERAL PROD-----	75	-----
	TOTAL-----	133,724	-----
BAYFIELD HARBOR, WIS.	0911 FRESH FISH, EXCEPT SHELLFISH-----	74	-----
	1011 IRON ORE AND CONCENTRATES-----	45	-----
	1402 SAND, GRAVEL, CRUSHED ROCK-----	8,970	-----
	1409 NONMETALLIC MINERALS, SEC-----	140	-----
	2411 LUMBS-----	44	-----
	2421 LUMBER-----	23	-----
	2901 FOOD MANUFACTURES, SEC-----	71	-----
	2911 GASOLINE-----	96	-----
	2914 DISTILLATE FUEL OIL-----	149	-----
	2921 LIQUEFIED GASES-----	104	-----
	3241 BUILDING CEMENT-----	60	-----
	3291 MISC NONMETALLIC MINERAL PROD-----	119	-----
	3711 MOTOR VEHICLES, PARTS, ETC-----	310	-----
	4112 COMMODITIES, NEC-----	4,062	-----
	TOTAL-----	14,309	256,251
BEAVER BAY HARBOR, MINN.	0911 FRESH FISH, EXCEPT SHELLFISH-----	9	-----
CHIPPEWA HARBOR (ISLE ROYALE), MICH.	NO COMMERCE REPORTED		-----
CORNUCOPIA HARBOR, WIS.	0911 FRESH FISH, EXCEPT SHELLFISH-----	43	-----
	1402 SAND, GRAVEL, CRUSHED ROCK-----	90	-----
	TOTAL-----	133	-----
GRAND MARAIS HARBOR, MINN.	0911 FRESH FISH, EXCEPT SHELLFISH-----	37	-----
KUPE RIVER HARBOR, MINN.	0911 FRESH FISH, EXCEPT SHELLFISH-----	1	-----
LA POINTE HARBOR, WIS.	2911 GASOLINE-----	96	-----
	2914 DISTILLATE FUEL OIL-----	149	-----
	2921 LIQUEFIED GASES-----	104	-----
	4112 COMMODITIES, NEC-----	5,972	-----
	TOTAL-----	4,321	206,253
LUTSEN HARBOR, MINN.	NO COMMERCE REPORTED		-----
PORT WING HARBOR, WIS.	0911 FRESH FISH, EXCEPT SHELLFISH-----	87	-----
WABODAD HARBOR, MINN.	NO COMMERCE REPORTED		-----
NONPROJECT			
SILVER BAY, MINN.	0911 FRESH FISH, EXCEPT SHELLFISH-----	7	-----
	1011 IRON ORE AND CONCENTRATES-----	1,623,560	-----
	1121 COAL AND LIGNITE-----	12,951	-----
	TOTAL-----	1,636,518	-----
TACOVITE HARBOR, MINN.	1011 IRON ORE AND CONCENTRATES-----	5,944,609	-----
	1411 Limestone-----	147,581	-----
	2915 RESIDUAL FUEL OIL-----	9,752	-----
	TOTAL-----	6,101,942	-----

# Waterborne Commerce of the United States, 1986

## CHICAGO, IL, DISTRICT

PAUMEGAN MARSH, ILL.

SECTION INCLUDES: ARTIFICIAL MARSH BASIN OF ABOUT 13.5 ACRES AND ENTRANCE CHANNEL FROM LAKE MICHIGAN APPROXIMATELY 2,000 FEET IN LENGTH. PROJECT DEPTH: 22 FEET IN ENTRANCE CHANNELS 16 FEET BETWEEN PIERS AND INNER BASIN; 8 FEET IN ANCHORAGE AREA OF APPROXIMATELY 6 ACRES.

### COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	477,157	1982-----	114,033
1978-----	478,733	1983-----	192,183
1979-----	544,281	1984-----	343,147
1980-----	686,363	1985-----	404,619
1981-----	211,049	1986-----	464,213

### FREIGHT TRAFFIC, 1986

#### DOMESTIC

(SHORT TONS)

COMMODITY	LAKEWISE RECEIPTS
TOTAL-----	464,213
1494 GYPSUM, CRUDE AND PLASTERS-----	252,402
3291 BUILDING CEMENT-----	210,851
3311 PIG IRON-----	960

### CHICAGO RIVER (MAIN AND NORTH BRANCH), ILL. (INCLUDED IN PORT OF CHICAGO)

SECTION INCLUDES: MAIN RIVER FROM RUSH STREET TO JUNCTION OF NORTH AND SOUTH BRANCH; NORTH BRANCH TO NORTH AVENUE. PROJECT DEPTH: 21 FEET FROM RUSH STREET TO THE MAIN RIVER TO NORTH AVENUE IN THE NORTH BRANCH, INCLUDING THE NORTH BRANCH CANAL AND THE NORTH TURNING BRANCH BASIN.

### COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	2,453,313	1982-----	2,568,479
1978-----	2,745,261	1983-----	1,853,720
1979-----	2,798,123	1984-----	1,901,778
1980-----	2,625,907	1985-----	1,565,893
1981-----	2,290,800	1986-----	2,677,886

\* PASSENGERS--29,080.

### FREIGHT TRAFFIC, 1986

#### FOREIGN

(SHORT TONS)

COMMODITY	CANADIAN THROUGH DOWNBOUND
TOTAL-----	6,149
1311 CRUDE PETROLEUM-----	6,149
TON-MILES, FOREIGN, 6,149.	

#### DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE			INTERNAL				
		RECEIPTS	THROUGH		RECEIPTS	SHIPMENTS	LOCAL	THROUGH	
			UPBOUND	DOWNBOUND				UPBOUND	DOWNBOUND
TOTAL-----	2,671,737	108,882	244,165	760,300	549,864	45,684	913,868	43,767	5,207
0111 SOYBEANS-----	1,685					1,686			
0931 MARINE SHELLS, UNMANUFACTURED-----	1,476							1,476	
1011 IRON ORE AND CONCENTRATES-----	479,806			479,806					
1121 COAL AND LIGNITE-----	31,301		17,987		13,314				
1411 LIMESTONE-----	25,754			25,754					
1482 SAND, GRAVEL, CRUSHED ROCK-----	999,736				111,436		868,050	20,250	
1499 NONMETALLIC MINERALS, NEC-----	275,521	108,882		13,983	113,506		39,150		
2014 TALLOW, ANIMAL FATS AND OILS-----	29,869					29,869			
2810 SODIUM HYDROXIDE-----	7,104		7,104						
2871 NITROGENOUS CHEM FERTILIZERS-----	16,723		16,723						
2911 GASOLINE-----	5,936			5,936					
2912 JET FUEL-----	12,797			12,797					
2913 KEROSENE-----	9,819		6,259	3,560					
2914 DISTILLATE FUEL OIL-----	120,214		74,856	45,358					
2915 RESIDUAL FUEL OIL-----	216,305		79,294	130,885				3,786	2,340
2916 LUBRICATING OILS AND GREASES-----	19,600			19,600					

## CHICAGO, IL, DISTRICT

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CHICAGO RIVER (MAIN AND NORTH BRANCH), ILL.  
(INCLUDED IN PORT OF CHICAGO)-CONTINUED

FREIGHT TRAFFIC, 1946-ACCOUNTED

DOMESTIC-CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		INTERNAL		LOCAL	THROUGH	
		RECEIPTS	THROUGH	RECEIPTS	SHIPMENTS		THROUGH	THROUGH
2917 NAPHTHA, PETROLEUM SOLVENTS----	15,303		10,413	2,023				2,867
2918 ASPHALT, TAR, AND PITCHES----	4,199			4,199				
2920 COKE, PETROLEUM IN SHAPE----	18,255							18,255
3201 CRILLING CEMENT-----	149,719			149,719				
3312 SLAG-----	3,360			3,360				
3314 IRON AND STEEL PRIMARY FORMS----	37,027			1,000	914			
3315 IRON, STEEL SHAPES, EAC SHEET----	141,491			141,491				
3316 IRON AND STEEL PLATES, SHEETS----	5,908			5,908				
3317 IRON AND STEEL PIPE AND TUBE----	10,743			10,743				
3319 IRON AND STEEL PRODUCTS, VARIOUS----	14,935			14,935				
3321 ALUMINUM AND ALLOYS, UNMANUFACTURED----	1,061			1,061				
3411 FABRICATED METAL PRODUCTS-----	2,208			2,208				
3511 MACHINERY, EXCEPT ELECTRICAL-----	511			511				
3711 MOTOR VEHICLES, PARTS, EQUIP-----	2,491			2,491				
4011 IRON AND STEEL SCRAP-----	19,351				13,215	6,116		
4118 WATERWAY IMPROVEMENT MAT-----	51,529		51,529					
TON-MILES, DOMESTIC-----	3,571,855							
TONS, ALL TRAFFIC-----	2,677,846							
TON-MILES, ALL TRAFFIC-----	3,597,234							

CHICAGO RIVER, SOUTH BRANCH, ILL. (INCLUDED IN PORT OF  
CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)

SECTION INCLUDED: DAME AVENUE TO LAKE STREET. PROJECT DEPTH: 4 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	3,099,545	1942-----	3,254,424
1978-----	3,050,229	1943-----	2,560,562
1979-----	3,325,459	1944-----	2,124,724
1980-----	3,510,705	1945-----	1,944,051
1981-----	3,341,323	1946-----	3,333,761

FREIGHT TRAFFIC, 1946

FOREIGN

(SHORT TONS)

COMMODITY	TONS
TOTAL-----	6,149
1311 CRUDE PETROLEUM-----	6,149
TON-MILES, FOREIGN-----	6,149

DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		INTERNAL		LOCAL	THROUGH	
		SHIPMENTS	THROUGH	RECEIPTS	SHIPMENTS		THROUGH	THROUGH
TOTAL-----	3,327,612	3,350	244,165	160,300	455,253	168,444	1,461,601	97,719
0111 SOYBEANS-----	5,171					1,485		1,654
0931 MARINE SHELLS, UNMANUFACTURED-----	1,476							1,476
1011 IRON ORE AND CONCENTRATES-----	479,806			479,806				
1121 COAL AND LIGNITE-----	442,685		17,987		411,384		13,314	
1411 LIMESTONE-----	25,754			25,754				
1442 SAND, GRAVEL, CRUSHED ROCK-----	1,151,318			13,840		137,703	299,738	39,137
1499 NONMETALLIC MINERALS, VARIOUS-----	192,380			13,984			111,506	27,466
2014 TALLOW, ANIMAL FATS AND OILS-----	29,869							
2421 LUMBER-----	2,224					2,224		
2621 STANDARD NEWSPRINT PAPER-----	934				934			
2810 SODIUM HYDROXIDE-----	7,104		7,104					
2821 PLASTIC MATERIALS-----	1,827				1,827			
2871 NITROGENOUS CHEM FERTILIZERS-----	16,723		16,723					
2911 GASOLINE-----	5,936			5,936				
2912 JET FUEL-----	12,797			12,797				
2913 KEROSENE-----	9,819		6,259	3,560				
2914 DISTILLATE FUEL OIL-----	120,214		74,856	45,358				
2915 RESIDUAL FUEL OIL-----	216,305		79,294	130,885			3,786	2,340
2916 LUBRICATING OILS AND GREASES-----	19,600			19,600				
2917 NAPHTHA, PETROLEUM SOLVENTS-----	15,303		10,413	2,023				2,867
2918 ASPHALT, TAR, AND PITCHES-----	4,199			4,199				
2920 COKE, PETROLEUM-----	19,740				1,485		18,255	

# Waterborne Commerce of the United States, 1986

CHICAGO RIVER, SOUTH BRANCH, ILL. (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

DOMESTIC--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		INTERNAL		LOCAL	THROUGH	
		SHIPMENTS	UPBOUND	DOWNBOUND	RECEIPTS		UPBOUND	DOWNBOUND
3241 FUEL OIL, DIESEL	109,719			15,399			94,320	
3312 IRON AND STEEL PRIMARY FORMS	3,360						3,360	
3314 IRON AND STEEL SHAPES, EXC SHEET	37,027			1,000			35,113	914
3315 IRON AND STEEL SHAPES, EXC SHEET	1,317	1,680					141,491	
3316 IRON AND STEEL SHAPES, EXC SHEET	5,908						5,908	
3317 IRON AND STEEL PIPE AND TUBE	17,743						10,743	
3319 IRON AND STEEL PRODUCTS, NEC	14,935						14,383	552
3324 ALUMINUM AND ALLOYS, IN FORMS	1,000						1,000	
3411 FERTILIZED METAL PRODUCTS	2,208						2,208	
3412 FERTILIZED METAL PRODUCTS	511						511	
3413 FERTILIZED METAL PRODUCTS	2,491						2,491	
3414 FERTILIZED METAL PRODUCTS	1,574	1,680				164,735		19,331
3415 WATERWAY IMPROVEMENT MAT	31,529		31,529					
TOTAL, DOMESTIC	13,579,632							
TOTAL, ALL TRAFFIC	3,333,761							
TOTAL, ALL TRAFFIC	13,545,141							

CHICAGO SANITARY AND SHIP CANAL, ILL. (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)

SECTION INCLUDES CHICAGO SANITARY AND SHIP CANAL, DAMEN AVENUE, CHICAGO TO LOCKPORT, ILL. PROJECT DEPTH: 9 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	21,826,537	1982	19,063,704
1978	14,942,488	1983	18,748,800
1979	20,013,114	1984	15,293,449
1980	22,687,576	1985	15,904,359
1981	21,706,164	1986	19,524,066

FREIGHT TRAFFIC, 1986

LAKEWISE

(SHORT TONS)

COMMODITY	TOTAL	DOMESTIC LAKEWISE			
		RECEIPTS	SHIPMENTS	UPBOUND	DOWNBOUND
TOTAL	1,101,082	297,598	249,668	17,987	540,829
2001 IRON ORE AND CONCENTRATES	479,806				479,806
2002 LIME AND LIMEITE	17,987			17,987	
2003 LIMESTONE	25,754				25,754
2004 NONMETALLIC MINERALS, NEC	13,983	13,983			
2005 SODIUM HYDROXIDE	7,104		7,104		
2006 NITROGENOUS CHEM FERTILIZERS	19,222		19,222		
2007 SODIUM	5,936	5,936			
2008 JET FUEL	12,797	1,951			10,816
2009 KEROSENE	10,538	4,279	6,259		
2010 DISTILLATE FUEL OIL	143,664	63,114	74,856		5,694
2011 RESIDUAL FUEL OIL	243,168	149,283	93,885		
2012 LUBRICATING OILS AND GREASES	32,200	32,200			
2013 NAPHTHA, PETROLEUM SOLVENTS	13,836	2,023	11,813		
2014 ASPHALT, TARS, AND BITUMENS	23,799	23,799			
2015 FERTILIZED METAL	15,399				15,399
2016 IRON AND STEEL PRIMARY FORMS	1,000	1,000			
2017 IRON, STEEL SHAPES, EXC SHEET	1,680				1,680
2018 IRON AND STEEL SCRAP	1,680				1,680
2019 WATERWAY IMPROVEMENT MAT	31,529		31,529		
TOTAL, LAKEWISE	18,269,935				

INTERNAL

(SHORT TONS)

COMMODITY	TOTAL	RECEIPTS	SHIPMENTS	LOCAL	THROUGH	
					UPBOUND	DOWNBOUND
TOTAL	18,422,964	7,085,609	1,698,107	2,169,272	4,745,157	2,724,819
2003 CORN	372,177		180,146	1,751	5,320	184,960
2004 OATS	15,724				7,477	8,247
2005 WHEAT	130,626		25,216		1,578	103,832
2006 SOYBEANS	481,430		194,598			286,832
2007 COFFEE, RUBBER AND ALLIED GUMS	2,838	2,838				
2008 MARINE SHELLS, UNMANUFACTURED	11,894				11,894	
2009 IRON ORE AND CONCENTRATES	59,358	2,684			56,674	

## CHICAGO, IL, DISTRICT

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CHICAGO SANITARY AND SHIP CANAL, ILL. (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

INTERNAL--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	RECEIPTS	SHIPMENTS	LOCAL	THROUGH	
					UPBOUND	DOWNBOUND
1051 ALUMINUM DRES, CONCENTRATES	2,964	1,400	-----	-----	1,564	-----
1061 MANGANESE DRES, CONCENTRATES	2,256	4,213	-----	-----	17,232	811
1091 NONFERROUS DRES, CONCENTRATES	9,637	-----	-----	-----	9,637	-----
1121 COAL AND LIGNITE	4,689,233	3,148,718	-----	-----	1,530,250	15,265
1311 LIME, PULVERIZED	14,229	-----	198,313	-----	-----	31,916
1411 LIME, STEEL	15,240	8,707	-----	-----	6,533	-----
1442 SAND, GRAVEL, CRUSHED ROCK	2,524,706	837,891	240,300	1,312,200	132,833	1,482
1451 CLAY	1,409	-----	-----	-----	1,409	-----
1499 NONMETALLIC MINERALS, NEC	646,176	314,632	1,448	90,750	269,346	-----
2014 TALLOW, ANIMAL FATS AND OILS	50,945	-----	17,097	-----	-----	39,848
2042 ANIMAL FEEDS	4,300	-----	-----	-----	-----	4,340
2049 GRAIN, FEED, PARTS, NEC	1,863	-----	-----	-----	-----	1,863
2061 SUGAR	75,766	47,320	-----	-----	28,446	-----
2062 MOLASSES	50,795	-----	-----	-----	50,795	-----
2091 VEGETABLE OILS, MARG, SHORT	10,737	-----	-----	-----	8,362	2,375
2415 PULP, LOG	1,384	1,384	-----	-----	-----	-----
2421 LUMBER	10,449	3,200	-----	-----	5,025	2,224
2431 VEGET, PULP, WOOD, WASTE	11,007	1,775	-----	-----	9,232	-----
2611 PULP	1,321	1,321	-----	-----	-----	-----
2621 STANDAR, REASSEMBLY PAPER	934	-----	-----	-----	934	-----
2631 PAPER AND PAPER, WASTE	19,120	11,571	-----	-----	7,549	-----
2810 SODIUM HYDROXIDE, PRODUCTS	564,155	378,020	8,305	678	177,152	-----
2811 SODIUM TAR, OIL, GAS PRODUCTS	145,731	33,602	57,678	27,812	-----	24,839
2813 ALCOHOLS	432,570	259,531	2,844	7,197	162,998	-----
2817 BENZENE AND TOLUENE	132,051	6,153	28,266	42,825	44,747	10,000
2818 SULFURIC ACID	1,597	-----	-----	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC	450,549	244,653	17,086	29,789	135,707	23,314
2921 PLASTIC MATERIALS	1,827	-----	-----	-----	1,827	-----
2971 NITROGENOUS CHEM FERTILIZERS	217,219	6,165	-----	-----	187,907	23,147
2972 POTASSIUM CHEM FERTILIZERS	1,478	-----	-----	-----	1,478	-----
2973 PHOSPHATIC CHEM FERTILIZERS	14,269	5,336	-----	-----	12,933	-----
2979 FERTILIZER AND MATERIALS, NEC	31,574	1,496	-----	-----	26,999	3,079
2991 MISCELLANEOUS CHEMICAL PROD	87,592	5,736	-----	-----	52,814	28,842
2911 SODIUM CHLORIDE	224,475	36,400	24,356	17,222	48,863	97,634
2912 SODIUM CHLORIDE	17,937	-----	-----	15,548	-----	2,389
2913 ACETYLENE	30,473	19,930	-----	3,580	6,963	-----
2914 DISTILLATE FUEL OIL	437,925	130,943	73,109	226,905	6,968	-----
2915 RESIDUAL FUEL OIL	642,512	263,623	146,490	133,589	40,650	57,960
2916 LUBRICATING OILS AND GREASES	340,908	263,401	1,202	1,400	-----	74,905
2917 KEROSENE, PETROLEUM SOLVENTS	190,178	78,199	18,456	60,332	17,514	20,437
2918 ASPHALT, TARS, AND BITUMENS	749,670	195,234	101,734	200,947	17,350	234,605
2920 COKE, PETROLEUM COKES	1,030,357	122,689	370,107	21,300	336,349	179,472
2991 PETROLEUM AND COAL PROD, NEC	6,349	1,400	-----	3,349	-----	-----
3241 BUILDING CEMENT	572,886	453,135	187	-----	119,546	-----
3271 LIME	74,403	-----	-----	-----	62,344	12,059
3281 CUT STONE AND STONE PRODUCTS	7,600	7,600	-----	-----	-----	-----
3311 PIG IRON	50,276	7,069	-----	-----	41,762	1,445
3312 SLAB	298,089	-----	-----	-----	244,036	54,053
3314 IRON AND STEEL PRIMARY FORMS	327,221	27,393	-----	-----	200,815	99,013
3315 IRON, STEEL SHAPES, LYS SHEET	521,866	53,267	6,480	-----	315,830	146,289
3316 IRON AND STEEL PLATES, SHEETS	157,151	18,970	-----	-----	30,453	107,728
3317 IRON AND STEEL PIPE AND TUBE	49,435	15,751	-----	-----	32,084	1,600
3318 FERR ALLOYS	163,312	12,389	-----	-----	119,473	11,500
3319 IRON AND STEEL PRODUCTS, NEC	113,992	27,391	4,569	552	19,727	61,703
3321 NONFERROUS METALS, NEC	9,204	-----	-----	-----	9,204	-----
3323 LEAD AND ZINC, UNWORKED	16,716	3,245	-----	-----	13,471	-----
3324 ALUMINUM AND ALLOYS, UNWORKED	21,137	3,186	-----	-----	17,951	-----
3411 FABRICATED METAL PRODUCTS	34,731	18,136	-----	-----	16,595	-----
3511 MACHINERY, EXCEPT ELECTRICAL	8,444	983	-----	-----	7,461	-----
3711 MOTOR VEHICLES, PARTS, EQUIP	2,491	-----	-----	-----	2,491	-----
3731 SHIPS AND BOATS	16	-----	-----	-----	-----	16
4011 IRON AND STEEL SCRAP	852,897	1,922	56,028	1,566	35,595	757,776
4012 NONFERROUS METAL SCRAP	1,567	-----	-----	-----	-----	1,567
4029 WASTE AND SCRAP, NEC	12,667	-----	9,695	-----	-----	2,972
4111 WATER	1,200	-----	1,200	-----	-----	-----
TON-MILES, INTERNAL	257,891,837	-----	-----	-----	-----	-----
TONS, ALL TRAFFIC	19,524,046	-----	-----	-----	-----	-----
TON-MILES, ALL TRAFFIC	276,161,772	-----	-----	-----	-----	-----

CALUMET-SAG CHANNEL, ILL. (INCLUDED IN PORT OF CHICAGO, ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAY)

SECTION INCLUDES CALUMET-SAG CHANNEL FROM ITS JUNCTION WITH CHICAGO SANITARY AND SHIP CANAL TO BLUE ISLAND, LITTLE CALUMET AND CALUMET RIVERS TO TURNERS NASIN, ILL. PROJECT DEPTH: 9 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	6,343,439	1,620	1982	5,441,831	392
1978	5,034,231	1,200	1983	6,445,250	600
1979	5,830,427	1,290	1984	5,577,763	650
1980	6,042,097	1,300	1985	5,828,780	40,358
1981	5,441,966	1,300	1986	7,503,147	-----

# Waterborne Commerce of the United States, 1986

CALUMET-SAG CHANNEL, ILL. (INCLUDED IN PORT OF CHICAGO)  
ALSO INCLUDED IN STATISTICS FOR ILLINOIS WATERWAYS--COMMITTEE

FREIGHT TRAFFIC, 1986

DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	CANADIAN THROUGH		INTERNAL		TOTAL	THROUGH	
		RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS		SHIPMENTS	QUANTITY
TOTAL-----	7,503,117	36,221	542,810	92,754	556,251	314,689	439,061	2,310,937
0103 CORN-----	142,031						7,071	149,260
0104 OATS-----	15,724						1,477	4,247
0107 WHEAT-----	165,410						1,275	143,432
0111 SOYBEANS-----	253,661							263,661
0931 MARINE SHELLS, MANUFACTURED-----	10,418						10,418	
1011 IRON ORE AND CONCENTRATES-----	536,440		479,906				56,674	
1051 ALUMINUM ORES, CONCENTRATES-----	1,560						1,564	
1061 MANGANESE ORES, CONCENTRATES-----	18,043						17,232	811
1091 NONFERROUS ORES, CONCENTRATES, NEC-----	9,657			2,741			4,446	
1121 COAL AND LIGNITE-----	1,138,804			17,987			1,155,552	15,245
1311 CRUDE PETROLEUM-----	31,916					31,916		
1411 LIME-----	32,247		25,754		1,520		5,013	
1442 SAND, GRAVEL, UNWASHED ROCK-----	25,933				6,948		6,750	7,814
1451 CLAY-----	1,409						1,409	
1499 NONMETALLIC MINERALS, NEC-----	130,099				4,863		125,236	
2014 TALLOW, ANIMAL FATS AND OILS-----	9,979					9,979		
2042 ANIMAL FEEDS-----	4,340							4,340
2049 GRAIN MILL PRODUCTS, NEC-----	1,863							1,863
2061 SUGAR-----	28,446				15,014		15,432	
2062 MOLASSES-----	50,745				36,308		14,427	
2091 VEGETABLE OILS, MANG., SHORT-----	10,737						8,562	2,375
2421 LUMBER-----	5,025						5,025	
2431 VEILERS, POLYMER, WORKED WOOD-----	9,232						9,232	
2631 PAPER AND PAPERBOARD-----	7,549						7,549	
2810 SODIUM HYDROXIDE-----	180,512				65,011		3,160	112,141
2811 CRUDE TAR, OIL, GAS PRODUCTS-----	50,301							50,301
2813 ALCOHOLS-----	166,290				110,855		48,165	3,292
2817 BENZENE AND TOLUENE-----	93,183					12,064	44,747	56,772
2819 BASIC CHEMICALS AND PRIMS, NEC-----	245,113				97,422		111,636	38,285
2871 NITROGENOUS CHEM FERTILIZERS-----	215,553		2,499				187,307	25,147
2872 POTASSIUM CHEM FERTILIZERS-----	1,474							1,474
2873 PHOSPHATIC CHEM FERTILIZERS-----	12,943						12,943	
2879 FERTILIZER AND MATERIALS, NEC-----	30,078				3,158		23,841	3,079
2891 MISCELLANEOUS CHEMICAL PROD-----	41,656						52,814	28,842
2911 GASOLINE-----	159,957				46,976		10,511	100,783
2912 JET FUEL-----	46,872		30,255				14,228	2,589
2913 KEROSENE-----	11,252			719				10,543
2914 DISTILLATE FUEL OIL-----	69,115		7,946	23,450	6,968		30,731	
2915 RESIDUAL FUEL OIL-----	192,879		14,591	14,394	34,248	57,960	52,957	9,264
2916 LUBRICATING OILS AND GREASES-----	87,505			12,600		7,534		67,371
2917 NAPHTHA, PETROLEUM SOLVENTS-----	65,553		1,400		11,159	7,181	3,035	25,814
2918 ASPHALT, TAR, AND BITUMENS-----	461,135			19,600	6,906	191,932	173,411	10,444
2920 COKE, PETROLEUM COKE-----	519,415				46,760	4,465	3,100	289,643
2991 PETROLEUM AND COAL PROD., NEC-----	1,349						3,349	
3241 BUILDING CEMENT-----	40,645		15,399		3,200			22,046
3271 LIME-----	74,003							62,544
3311 PIG IRON-----	43,207				7,547			34,215
3312 SLAG-----	298,059				6,030			234,646
3314 IRON AND STEEL PRIMARY FORMS-----	263,801							145,702
3315 IRON, STEEL SHAPES, LAL SHEET-----	322,308		1,640		26,330		148,009	146,289
3316 IRON AND STEEL PLATES, SHEETS-----	132,273				5,417	2,128		19,128
3317 IRON AND STEEL PIPE AND TUBE-----	22,941				2,377			18,964
3318 FERROALLOYS-----	150,923							119,425
3319 IRON AND STEEL PRODUCTS, NEC-----	67,047					1,236		5,344
3321 NONFERROUS METALS, NEC-----	9,204							9,204
3323 LEAD AND ZINC, UNWORKED-----	13,471							13,471
3324 ALUMINUM AND ALLOYS, UNWORKED-----	16,871				1,265			15,606
3411 FABRICATED METAL PRODUCTS-----	14,387							14,387
3511 MACHINERY, EXCEPT ELECTRICAL-----	6,950							6,950
3731 SHIPS AND BOATS-----	16					16		
4011 IRON AND STEEL SCRAP-----	618,501		1,650			4,342		41,545
4012 NONFERROUS METAL SCRAP-----	1,567							1,567
4029 WASTE AND SCRAP, NEC-----	2,972							2,972
TOTAL THROUGH-----	167,318,675							

LAKE CALUMET, ILL. (INCLUDED IN PORT OF CHICAGO)

SECTION INCLUDED: ENTRANCE CHANNEL FROM THE CALUMET RIVER TO A HARBOR AREA AT SOUTH END OF LAKE WITH A CHANNEL EXTENDING NORTHWARD FOR A DISTANCE OF 3,000 FEET AND A WIDTH OF 1,000 FEET. PROJECT DEPTH: 27 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	1,354,761	3,240	1982-----	942,514	
1978-----	1,814,313		1983-----	1,106,308	
1979-----	2,512,113		1984-----	1,885,476	
1980-----	1,314,536		1985-----	1,419,181	
1981-----	1,163,649		1986-----	1,054,483	

## CHICAGO, IL, DISTRICT

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LAKE CALUMET, ILL. (INCLUDED IN PORT OF CHICAGO)--CONTINUED

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		CANADIAN	LAKEWISE		DOMESTIC		LOCAL
		OVERSEAS			INTERVAL				
		IMPORTS	EXPORTS		RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS	
TOTAL	1,154,943	81,182	1,102	96,409	350,420	2,995	459,224	277,597	197,654
0103 CORN	22,031							22,031	
0107 WHEAT	6,033							6,033	
0111 SOYBEANS	34,152							34,152	
1051 ALUMINUM DRESS, CONCENTRATES	1,564						1,564		
1061 MANGANESE DRESS, CONCENTRATES	1,406						1,406		
1411 LIMESTONE	25,474				22,000		3,474		
1442 SAND, GRAVEL, CRUSHED ROCK	20,250								20,250
1499 NONMETALLIC MINERALS, NEC	115,816			21,274	45,054		46,484		
2014 FALCON, AVIATION FATS & OILS	847		847						
2042 ANIMAL REFUSE	1,500								1,500
2051 SOYBEAN	3,336						3,336		
2091 ALCOHOLIC BEVERAGES	17		17						
2091 VEGETABLE OILS, SEED, SHORT	2,042	1,110	232						700
2810 STEAM HYDRATOR	115,501						112,141		3,360
2811 CRUDE TAR, PULP, GAS PRODUCTS	30,754			4,542				10,080	11,392
2813 ALCOHOL	17,521			14,229				3,292	
2817 FERTILIZER AND FERTILIZERS	32,275			5,647				10,080	16,548
2819 BASIC CHEMICALS AND DERIVS, NEC	255,944	5,441		3,370	77,627		51,600	23,314	136,092
2872 PHOSPHORIC ACID FERTILIZERS	31,376			29,896			1,478		
2876 INSECTICIDES, DISINFECTANTS	20	20							
2891 MISCELLANEOUS CHEMICAL PRODS	76,833		16				52,151	24,716	
2917 NAPHTHA, PETROLEUM SOLVENTS	15,320			4,499			1,355	2,746	6,720
2920 COKE, PETROLEUM COAL	2,854						2,854		
3241 PORTLAND CEMENT	2,475				194,839		10,092		
3271 LIME	51,752					1,608	67,344		
3311 PIPE, IRON AND STEEL	1,534						1,508		
3314 IRON AND STEEL PRIMARY FORMS	8,334						8,334		
3315 IRON, STEEL SHAPES, LAC SHEET	160,264	80,246			9,721		66,826	1,373	
3316 IRON AND STEEL PLATES, SHEETS	3,242	771					2,471		
3317 IRON AND STEEL PIPE AND TUBE	424	404							
3318 FERROALLOY	7,200						7,200		
3319 IRON AND STEEL PRODUCTS, NEC	1,400	20			1,380				
3322 COPPER ALLOYS, PRIMARY	42	42							
3323 LEAD AND ZINC, PRIMARY	56	56							
3324 ALUMINUM AND ALLOYS, PRIMARY	1,400						1,400		
3411 FABRICATED METAL PARTS, NEC	80	80							
3511 MACHINERY, EXCEPT ELECTRICAL	216	216							
3611 ELECTRICAL APPR AND EQUIP	20	20							
3791 MISD TRANSPORTATION EQUIPMENT	6	6							
4011 IRON AND STEEL SCRAP	161,469					1,347	19,140	140,892	
TOTAL	1,254,725								

CALUMET HARBOR AND RIVER, ILL. AND IND.  
(INCLUDED IN PORT OF CHICAGO)

SECTION INCLUDES: CALUMET HARBOR AND RIVER TO TURNING BASIN NO. 5. PROJECT DEPTH: 29 FEET IN APPROACH CHANNEL, 28 FEET IN OUTER HARBOR AND BASIN AREA, 27 FEET IN RIVER ENTRANCE CHANNEL TO E. J. &amp; E. R. W. BRIDGE, AND 27 FEET IN RIVER TO AND INCLUDING BASIN NO. 5.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR		TONS
		1975	1986	
1977	19,734,837		1982	12,778,095
1978	25,242,282		1983	12,454,073
1979	24,014,852		1984	13,740,110
1980	16,415,499		1985	12,799,728
1981	17,631,420		1986	11,481,257

\* PASSENGERS-41,300

FREIGHT TRAFFIC, 1986

FOREIGN

(SHORT TONS)

COMMODITY	TOTAL	OVERSEAS		CANADIAN		THROUGH	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	EASTBOUND	WESTBOUND
TOTAL	3,293,414	1,183,071	423,738	1,102	88,992	1,017,144	96,848
0103 CORN	91,820		44,641				47,179
0104 OATS	5,100				5,100		
0111 SOYBEANS	140,086		140,086				
0129 FIELD CROPS, NEC	40	40					
0141 FRESH AND FROZEN VEGETABLES	26	26					
0861 FOREST PRODUCTS, NEC	12	12					
0911 FRESH FISH, EXCEPT SHALFISH	5	5					
1011 IRON ORE AND CONCENTRATES	532,711	126,841			405,870		
1051 ALUMINUM DRESS, CONCENTRATES	49,807	49,792	15				
1061 MANGANESE DRESS, CONCENTRATES	9,467	9,467					
1191 COAL AND LIGNITE, CONCENTRATES	18,961					18,961	
1311 CRUDE PETROLEUM	37,411				37,411		
1442 SAND, GRAVEL, CRUSHED ROCK	4	4					
1451 CLAY	74,032	163	46,153		27,716		
1499 NONMETALLIC MINERALS, NEC	281,345	34,506			222,605		24,274

## Waterborne Commerce of the United States, 1986

CALUMET HARBOR AND RIVER, ILL. AND IND.  
(INCLUDED IN PORT OF CHICAGO)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

FOREIGN--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	OVERSEAS				CANADIAN	
		IMPORTS	EXPORTS	THROUGH EASTBOUND	THROUGH WESTBOUND	IMPORTS	EXPORTS
2011 MEAT, FRESH, CHILLED, FROZEN	22		22				
2014 TALLOW, ANIMAL FATS AND OILS	897			897			
2015 ANIMAL BY-PRODUCTS, NEC	82		53			29	
2021 DAIRY PRODUCTS, NEC	69	69					
2031 FISH AND SHELLFISH, PREPARED	8	8					
2034 VEGETABLES AND PREP, NEC	170	170					
2037 PREP FRUIT AND VEG JUICE, NEC	425	425					
2042 ANIMAL FEEDS	34	34	491				
2049 GRAIN MILL PRODUCTS, NEC	65	65					
2081 ALCOHOLIC BEVERAGES	1,314	1,213		17		84	
2091 VEGETABLE OILS, MARG, SHORT	1,551	209		232	1,110		
2095 ICE	166	166					
2099 MISCELLANEOUS FOOD PRODUCTS	2,074	435	2,189				
2111 TOBACCO MANUFACTURES	26	26					
2211 BASIC TEXTILE PRODUCTS	190	190	1				
2311 APPAREL	40	45	1				
2421 LINGERIE	20,157	21				20,136	
2431 VEILS, PYJAMAS, HUNTER HOODS	526	16				512	
2491 FOOT MANUFACTURES, NEC	21	21					
2511 FURNITURE AND FIXTURES	194	193				6	
2631 PAPER AND PAPERMANUFACTURE	769	644	2			122	
2691 PULP AND PAPER PRODUCTS, NEC	17	16	1				
2711 PRINTED MATTER	20	19	7				
2811 CRUDE TA, NGL, GAS PRODUCTS	50,701	42				47,127	8,532
2815 ALCOHOLS	23,346	40				9,079	14,229
2817 BENZENE AND TOLUENE	31,655					25,408	5,647
2819 BASIC CHEMICALS AND PROD, NEC	45,184	3,233	1,045		5,941	25,555	9,370
2821 PLASTIC MATERIALS, NEC	549	490	99				
2822 SYNTHETIC RUBBER	5		5				
2831 GUMS	134	124	15				
2841 SOAP	96	96					
2851 PAINTS	372	361				11	
2861 OIL AND LIQD CHEMICALS	87	87					
2872 POTASSIUM CHEM FERTILIZERS	116,038					86,140	29,898
2876 INSECTICIDES, DISINFECTANTS	97	29	57		20		
2891 MISCELLANEOUS CHEMICAL PROD	591	167	406	16			
2911 GASOLINE	9,450					9,450	
2914 DISTILLATE FUEL OIL	7,650						7,650
2915 RESIDUAL FUEL OIL	3,834					3,834	
2916 LUBRICATING OILS AND GREASES	1		1				
2917 ASPHALT, PETROLEUM SOLVENTS	26,955		26			26,430	4,499
2918 ASPHALT, TARS, AND BITUMENS	24,646					24,646	
2920 COKE, PETROLEUM COKE	623,448		18,747			54,802	343,659
3011 PETROLEUM AND COAL PROD, NEC	21	21					
3011 RUBBER AND MISCELLANEOUS PROD	405	899	6				
3111 LEATHER AND LEATHER PRODUCTS	228	228					
3211 GLASS AND GLASS PRODUCTS	430	430					
3241 BUILDING CEMENT	60	60					
3251 STRUCTURAL CLAY PRODUCTS	2,031	2,031					
3281 CUT STONE AND STONE PRODUCTS	281	281					
3291 MISCELLANEOUS MINERAL PROD	198	158	40				
3314 IRON AND STEEL PRIMARY FORMS	32,323	32,361				62	
3315 IRON, STEEL SHAPES, EXC SHEET	916,047	830,759			86,286	5,042	
3316 IRON AND STEEL PLATES, SHEETS	12,071	11,300			771		
3317 IRON AND STEEL PIPE AND TUBE	16,000	16,196			404		
3318 FERRALLOYS	18,154	12,588				5,566	
3319 IRON AND STEEL PRODUCTS, NEC	2,401	2,320			201	21	
3321 NONFERROUS METALS, NEC	456	456					
3322 COPPER ALLOYS, UNMOLDED	90	48			42		
3323 LEAD AND ZINC, UNMOLDED	18,501	18,435			66		
3324 ALUMINUM AND ALLOYS, UNMOLDED	9,018	2,537				7,081	
3411 FABRICATED METAL PRODUCTS	12,276	12,164	34		80		
3511 MACHINERY, EXCEPT ELECTRICAL	6,694	6,237	434		216	7	
3611 ELECTRICAL MACH AND EQUIP	1,677	1,638	19		20		
3711 MOTOR VEHICLES, PARTS, EQUIP	857	746	109			2	
3731 SHIPS AND BOATS	31	31					
3791 MISC TRANSPORTATION EQUIPMENT	267	261			6		
3811 INSTR, TIME, PHOTO, OPT GOODS	33	28				2	
3911 MISC MANUFACTURED PRODUCTS	320	318	2				
4011 IRON AND STEEL SCRAP	9,539		6,936				2,603
4012 NONFERROUS METAL SCRAP	807	847					
4112 COMMODITIES, NEC	276	252	23			1	
9999 DEPARTMENT OF DEFENSE AND SCI	27		27				
TOTAL		4,226,879					

## DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE			
		RECEIPTS	SHIPMENTS	THROUGH EASTBOUND	THROUGH WESTBOUND
TOTAL	3,339,976	1,791,575	1,092,057	24,845	431,499
1011 IRON ORE AND CONCENTRATES	669,850	669,850			
1121 COAL AND LIGNITE	1,146,023	253,029	890,994		
1411 LIMESTONE	869,648	847,648			22,000
1499 NONMETALLIC MINERALS, NEC	54,784	4,730			45,054

## CHICAGO, IL, DISTRICT

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CALUMET HARBOR AND RIVER, ILL. AND IND.  
(INCLUDED IN PORT OF CHICAGO)--CONTINUED

FREIGHT TRAFFIC, 1985--CONTINUED

DOMESTIC--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		
		RECEIPTS	SHIPMENTS	THROUGH EASTBOUND WESTBOUND
2810 SODIUM HYDROXIDE	7,814		7,814	
2817 BENZENE AND TOLUENE	1,400		1,400	
2819 BASIC CHEMICALS AND PROD, NEC	77,627			17,627
2871 NITROGENOUS CHEM FERTILIZERS	37,768		35,269	2,499
2911 GASOLINE	7,298		7,298	
2912 JET FUEL	21,423	1,985		19,439
2913 KEROSENE	719			719
2914 DISTILLATE FUEL OIL	42,034		14,532	25,722
2915 RESIDUAL FUEL OIL	50,167		17,178	14,591
2916 LUBRICATING OILS AND GREASES	12,600			12,600
2917 NAPHTHA, PETROLEUM SOLVENTS	1,400			1,400
2918 ASPHALT, TAR, AND PITCHES	19,600			19,600
2920 COKE, PETROLEUM COKE	114,965		114,965	
3201 BUILDING CEMENT	179,239			179,239
3271 LIME	1,608			1,608
3315 IRON, STEEL SHAPES, EXC SHEET	11,411			2,721
3316 IRON AND STEEL PLATES, SHEETS	3,632	2,920	772	
3318 FERROALLOYS	1,400			
3319 IRON AND STEEL PRODUCTS, NEC	2,793	1,415		1,378
3311 IRON AND STEEL SCRAP	4,667	1,600		3,067
TOTAL--LAKEWISE		10,046,733		

INTERNAL

(SHORT TONS)

COMMODITY	TOTAL	RECEIPTS	SHIPMENTS	LOCAL		THROUGH	
						EASTBOUND	WESTBOUND
TOTAL	4,847,367	2,077,833	1,027,185	140,105	574,029	928,157	
0103 COAL	170,000	5,320	131,139	1,751		31,790	
0104 OATS	15,724	7,477	5,247				
0107 WHEAT	99,377	1,578	79,335			18,464	
0111 SOYBEANS	249,529		194,620			54,909	
0931 MARINE SHELLS, UNMANUFACTURED	10,418					10,418	
1011 IRON ORE AND CONCENTRATES	71,129	8,447	14,455		45,227		
1061 MANGANESE ORES, CONCENTRATES	16,637	15,826	811				
1091 NONFERROUS ORES, CONCENT, REL	6,846	4,846					
1121 COAL AND LIGNITE	1,139,980	3,100,872	13,793	19,163	4,580	1,472	
1411 LIMESTONE	3,117	1,535			1,582		
1442 SAND, GRAVEL, CRUSHED ROCK	35,335			4,050	1,417	27,868	
1451 CLAY	1,409	1,409					
1499 NONMETALLIC MINERALS, NEC	78,748	11,011			7,737		
2042 ANIMAL FEEDS	2,840		2,840				
2049 GRAIN MILL PRODUCTS, NEC	1,863		1,863				
2061 SUGAR	12,096	12,096					
2062 MOLASSES	14,427	14,427					
2091 VEGETABLE OILS, MARK, SHORT	10,037	8,362	1,675				
2421 LUMBER	5,025	5,025					
2431 VENEER, PLYWOOD, WRAFT WOOD	9,232	1,437			7,795		
2631 PAPER AND PAPERBOARD	7,549	4,829			2,720		
2811 CRUDE TAR, OIL, GAS PRODUCTS	28,829		16,559	12,270			
2813 ALCOHOLS	44,165	10,308			37,857		
2817 BENZENE AND TOLUENE	54,461	8,100		9,744	36,647		
2819 BASIC CHEMICALS AND PROD, NEC	6,685	3,779			2,906		
2871 NITROGENOUS CHEM FERTILIZERS	211,054	47,083	1,400		140,824	21,741	
2873 PHOSPHATIC CHEM FERTILIZERS	12,933				12,933		
2879 FERTILIZER AND MATERIALS, NEC	26,920	4,627			19,214	3,079	
2891 MISCELLANEOUS CHEMICAL PROD	4,789	663	4,126				
2911 GASOLINE	102,670	1,887	6,600	3,149		91,034	
2912 JET FUEL	2,384					2,384	
2913 KEROSENE	10,543	6,963		3,580			
2914 DISTILLATE FUEL OIL	4,412			4,412			
2915 RESIDUAL FUEL OIL	30,192	6,402		23,790			
2916 LUBRICATING OILS AND GREASES	67,371					67,371	
2917 NAPHTHA, PETROLEUM SOLVENTS	23,757		10,710	13,047			
2918 ASPHALT, TAR, AND PITCHES	67,336	3,260	3,548	16,219	7,184	39,125	
2920 COKE, PETROLEUM COKE	485,489	248,100	117,755	22,796	37,186	57,652	
3201 BUILDING CEMENT	11,954	11,954					

# Waterborne Commerce of the United States, 1986

CALUMET HARBOR AND RIVER, ILL. AND IND.  
(INCLUDED IN PORT OF CHICAGO)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

DOMESTIC--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	RECEIPTS	SHIPMENTS	LOCAL	THROUGH	
					EASTBOUND	WESTBOUND
1271 LIME	12,059		12,059			
1311 FUEL OIL	34,152	24,444	1,445		8,221	
1312 IRON	292,059	112,825	13,370		121,621	44,043
1313 IRON AND STEEL PRIMARIES, LOTS	255,463	64,996	7,820		92,348	90,279
1315 IRON, STEEL SHAPES, END SHEET	225,325	59,769	12,946		19,814	111,225
1316 IRON AND STEEL PLATES, SHEETS	122,257	16,637	42,713			62,887
1317 IRON AND STEEL PIPE, END LINE	20,564	17,650			1,314	1,600
1318 FERRALLOY	143,723	102,715	10,300		29,508	1,207
1319 IRON AND STEEL PRODUCTS, NEC	67,244	6,777	5,861			53,601
1321 NONFERROUS METALS, NEC	9,204	9,204				
1323 LEAD AND ZINC, UNMANAGED	13,471	13,471				
1324 ALUMINUM AND ALLOYS, UNMANAGED	14,206	14,206				
1411 FABRICATED METAL PRODUCTS	14,387	1,600			12,787	
1511 MACHINERY, EXCEPT ELECTRICAL	5,950	4,470			480	
1611 IRON AND STEEL REBAR	452,397	7,436	295,548	4,550	10,369	143,454
1612 NONFERROUS METAL REBAR	1,567	1,567				
1613 WASTE AND SCRAP, NEC	2,972					2,972
TONS-ALLS, TOTAL	14,944,540					
TONS, ALL TRAFFIC	11,001,257					
TONS-ALLS, ALL TRAFFIC	34,920,161					

PORT OF CHICAGO, ILL.

SECTION INCLUDES: CHICAGO HARBOR, CHICAGO RIVER, MAIN AND NORTH BRANCH, CHICAGO RIVER, SOUTH BRANCH, CHICAGO SANITARY AND SHIP CANAL, CALUMET-SAG CHANNEL AND LAKE CALUMET, ILL., CALUMET HARBOR AND RIVER, ILL. AND IND. PROJECT ORPHEE SEE CHICAGO HARBOR, CHICAGO RIVER, MAIN AND NORTH BRANCH, CHICAGO RIVER, SOUTH BRANCH, CHICAGO SANITARY AND SHIP CANAL, CALUMET-SAG CHANNEL AND LAKE CALUMET, ILL., AND IND.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	36,116,148	387,562	1982	26,819,793	331,152
1978	39,690,722	329,082	1983	24,450,287	591,904
1979	38,692,988	373,754	1984	23,813,368	655,124
1980	32,993,240	305,744	1985	22,610,102	504,000
1981	31,549,167	300,090	1986	20,330,097	608,416

FREIGHT TRAFFIC, 1986

FOREIGN

(SHORT TONS)

COMMODITY	TOTAL	OVERSEAS		CANADIAN	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS
TOTAL	3,376,141	1,297,154	424,900	1,150,487	503,600
0105 CEREALS	91,820		44,641		47,179
0106 OATS	5,100			5,100	
0111 SOYBEANS	140,046		140,046		
0124 FISH CRAP, NEC	40		40		
0141 FRESH AND FROZEN VEGETABLES	26		26		
0201 FOREST PRODUCTS, NEC	12		12		
0311 FRESH FISH, EXCEPT SHELLFISH	5		5		
0312 FISH OIL AND CONCENTRATES	557,812	151,942		405,870	
0501 ALUMINUM DRESS, CONCENTRAT	49,807	49,792	15		
0502 TANTALUM DRESS, CONCENTRATES	9,467	9,467			
1001 COAL AND LIGNITE	10,961				14,961
1311 CRUDE PETROLEUM	43,560			43,560	
1402 SAND, GRAVEL, CRUSHED ROCK	4		4		
1403 CLAY	74,032	163	46,153		27,716
1404 NONMETALLIC MINERALS, NEC	312,130	34,506		277,624	
2011 MEAT, FRESH, CHILLED, FROZEN	22		22		
2014 FALCON, ANIMAL FATS AND OILS	697		697		
2015 ANIMAL BY-PRODUCTS, NEC	82		53	29	
2021 DAIRY PRODUCTS, NEC	69		69		
2031 FISH AND SHELLFISH, PREPARED	8		8		
2034 VEGETABLES AND FRUIT, NEC	170		170		
2039 PREP FRUIT AND VEG JUICE, NEC	425		425		
2082 ANIMAL FLESH	527		36	491	
2084 GRAIN MILL PRODUCTS, NEC	65		65		
2081 ALCOHOLIC BEVERAGES	1,314	1,213		84	
2091 VEGETABLE OILS, MARG, SHORT	1,331	1,319	232		
2095 ICE	166				
2099 MISCELLANEOUS FOOD PRODUCTS	2,624	435	2,189		
3111 TOBACCO MANUFACTURES	26		26		
3112 BASIC TEXTILE PRODUCTS	190		180	1	
3511 APPAREL	46		45	1	
3921 LUMBER	20,197		21	20,136	
3931 VEGETR, POLYMER, MOLDED MOLD	928		16	912	
3932 MOLD MANUFACTURES, NEC	21		21		
3933 FURNITURE AND FIXTURES	199		199		

## CHICAGO, IL, DISTRICT

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PORT OF CHICAGO, ILL.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

FOREIGN--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	OVERSEAS		CANADIAN	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS
2631 PAPER AND PAPERBOARD	768	644	2	122	
2691 PULP AND PAPER PRODUCTS, NEC	17	16	1		
2711 PRINTER MATTER	24	19	7		
2811 CRUDE TAR, OIL, GAS PRODUCTS	50,701	42		50,659	
2813 ALCOHOLS	23,344	40		23,308	
2817 XYLENE AND TOLUENE	31,055			31,055	
2819 BASIC CHEMICALS AND PROD, NEC	45,131	9,174	1,055	30,925	
2821 PLASTIC MATERIALS	589	493	99		
2822 SYNTHETIC RUBBER	5		5		
2831 DRUGS	139	124	15		
2841 SOAP	96	96			
2851 PAINTS	372	361		11	
2861 GUM AND GUM CHEMICALS	87	87			
2872 POTASSIC CHEM FERTILIZERS	116,038			116,038	
2876 INSECTICIDES, DISINFECTANTS	97	40	57		
2891 MISCELLANEOUS CHEMICAL PROD	591	167	424		
2911 GASOLINE	9,450			9,450	
2914 DISTILLATE FUEL OIL	7,050				7,050
2915 RESIDUAL FUEL OIL	5,834			5,834	
2916 LUBRICATING OILS AND GREASES	1		1		
2917 NAPHTHA, PETROLEUM SULFONTS	26,955		26	26,929	
2918 ASPHALT, TAR, AND PITCHES	24,648			24,648	
2920 CRKE, PETROLEUM CRKE	643,680		180,787	56,802	404,091
2991 PETROLEUM AND COAL PROD, NEC	21	21			
3011 RUBBER AND MISC PLASTIC PROD	905	899	6		
3111 LEATHER AND LEATHER PRODUCTS	228	228			
3211 GLASS AND GLASS PRODUCTS	430	430			
3241 BUILDING CEMENT	60	60			
3251 STRUCTURAL CLAY PRODUCTS	2,031	2,031			
3291 CUT STONE AND STONE PRODUCTS	281	281			
3291 MISC NONMETALLIC MINERAL PROD	198	158	40		
3314 IRON AND STEEL PRIMARY FORMS	52,323	32,261		62	
3315 IRON, STEEL SHAPES, ETC SHEET	916,087	911,045		5,042	
3316 IRON AND STEEL PLATES, SHEETS	12,071	12,071			
3317 IRON AND STEEL PIPE AND TUBE	16,600	16,600			
3318 FERROALLOYS	18,154	12,548		5,566	
3319 IRON AND STEEL PRODUCTS, NEC	2,401	2,340		21	
3321 NONFERROUS METALS, NEC	456	456			
3322 COPPER ALLOYS, UNWORKED	90	90			
3323 LEAD AND ZINC, UNWORKED	18,501	18,501			
3324 ALUMINUM AND ALLOYS, UNWORKED	9,618	2,537		7,081	
3411 FABRICATED METAL PRODUCTS	12,278	12,244	34		
3511 MACHINERY, EXCEPT ELECTRICAL	6,494	6,453	434	7	
3611 ELECTRICAL MACH AND EQUIP	1,677	1,658	19		
3711 MOTOR VEHICLES, PARTS, EQUIP	857	746	109	2	
3731 SHIPS AND BOATS	31	31			
3791 MISC TRANSPORTATION EQUIPMENT	267	267			
3811 INSTR, TIME, PHOTO, OPT GOODS	33	28	3	2	
3911 MISC MANUFACTURED PRODUCTS	320	318	2		
4011 IRON AND STEEL SCRAP	9,539		6,936		2,603
4012 NONFERROUS METAL SCRAP	847	847			
4112 COMMODITIES, NEC	276	252	23	1	
9999 DEPARTMENT OF DEFENSE AND SCI	27		27		

## DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		INTERNAL		LOCAL
		RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS	
TOTAL	20,954,356	2,586,696	1,343,080	11,158,094	3,535,706	2,330,780
0103 CORN	340,347			5,320	333,316	1,751
0104 OATS	15,724			7,477	8,247	
0107 WHEAT	112,162			1,578	110,584	
0111 SOYBEANS	426,521				426,521	
0841 CRUDE RUBBER AND ALLIED GUMS	2,838			2,818		
1011 IRON ORE AND CONCENTRATES	695,436	669,850		11,131	14,455	
1051 ALUMINUM ORES, CONCENTRATES	2,964			2,964		
1061 MANGANESE ORES, CONCENTRATES	22,256			21,445	811	
1091 NONFERROUS ORES, CONCENT, NEC	9,637			9,637		
1121 COAL AND LIGNITE	5,848,267	255,029	890,994	4,669,288	13,793	19,163
1311 CRUDE PETROLEUM	140,229				140,229	
1411 LIMESTONE	885,470	869,648		15,240		1,582
1442 SAND, GRAVEL, CRUSHED ROCK	2,521,807			969,307	240,300	1,312,200
1451 CLAY	1,409			1,409		
1499 NONMETALLIC MINERALS, NEC	816,088	177,649		576,241	1,448	60,750
2014 TALLOW, ANIMAL FATS AND OILS	56,945				56,945	
2042 ANIMAL FEEDS	4,340				4,340	
2049 GRAIN MILL PRODUCTS, NEC	1,863				1,863	
2061 SUGAR	75,766			75,766		
2062 MOLASSES	50,795			50,795		
2091 VEGETABLE OILS, MARG, SHORT	10,737			8,362	2,375	
2415 PULPWOOD, LOG	1,384			1,384		
2421 LUMBER	10,449			8,225	2,224	
2431 VENEER, PLYWOOD, WORKED WOOD	3,212			3,212		
2611 PULP	1,328			1,328		
2621 STANDARD NEWSPRINT PAPER	934			934		
2631 PAPER AND PAPERBOARD	16,400			16,400		

## Waterborne Commerce of the United States, 1986

PORT OF CHICAGO, ILL.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(DOMESTIC--CONTINUED)

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		INTERNAL		LOCAL
		RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS	
2810 SODIUM HYDRATE	582,433	-----	14,918	555,172	8,305	4,038
2811 CRUDE TAR, OIL, GAS PRODUCTS	145,731	-----	-----	33,602	84,317	27,812
2813 ALCOHOLS	394,713	-----	-----	384,672	2,844	7,197
2817 BENZENE AND TOLUENE	90,804	-----	1,400	14,253	38,346	42,805
2818 SULPHURIC ACID	1,597	-----	-----	-----	1,597	-----
2819 BASIC CHEMICALS AND PRIM, NEC	636,906	77,627	-----	377,454	40,400	141,425
2821 PLASTIC MATERIALS	1,627	-----	-----	1,627	-----	-----
2871 NITROGENOUS CHEM FERTILIZERS	109,159	-----	54,511	53,248	1,400	-----
2872 POTASSIC CHEM FERTILIZERS	1,474	-----	-----	1,474	-----	-----
2873 PHOSPHATIC CHEM FERTILIZERS	5,336	-----	-----	5,336	-----	-----
2879 FERTILIZER AND MATERIALS, NEC	9,281	-----	-----	9,281	-----	-----
2891 MISCELLANEOUS CHEMICAL PROD	87,392	-----	-----	58,550	28,842	-----
2911 GASOLINE	146,675	5,934	7,298	85,263	30,956	17,222
2912 JET FUEL	49,769	34,221	-----	-----	-----	15,548
2913 KEROSENE	41,011	4,279	6,259	26,893	-----	3,580
2914 DISTILLATE FUEL OIL	604,605	71,080	91,188	137,911	73,109	231,317
2915 RESIDUAL FUEL OIL	915,399	149,283	111,063	304,273	204,450	144,330
2916 LUBRICATING OILS AND GREASES	305,737	32,700	-----	263,401	8,736	1,400
2917 NAPHTHA, PETROLEUM SOLVENTS	207,036	2,023	11,815	90,713	39,093	63,394
2918 ASPHALT, TAR, AND BITUMENS	727,360	23,799	-----	705,400	297,214	200,947
2920 COKE, PETROLEUM COKE	1,053,501	-----	114,980	421,892	492,327	24,302
2991 PETROLEUM AND COAL PROD, NEC	6,349	-----	-----	1,400	1,600	3,349
3241 BUILDING CEMENT	767,526	194,638	-----	572,701	187	-----
3271 LIME	76,011	-----	1,608	62,344	12,059	-----
3281 CUT STONE AND STONE PRODUCTS	7,600	-----	-----	7,600	-----	-----
3311 PIG IRON	42,053	-----	-----	40,608	1,445	-----
3312 SLAG	135,595	-----	-----	122,215	13,370	-----
3314 IRON AND STEEL PRIMARY FORMS	145,574	1,000	-----	135,840	8,734	-----
3315 IRON, STEEL SHAPES, BAR SHEET	403,923	9,721	1,680	349,683	42,839	-----
3316 IRON AND STEEL PLATES, SHEETS	97,956	2,920	772	49,423	44,641	-----
3317 IRON AND STEEL PIPE AND TUBE	46,521	-----	-----	46,521	-----	-----
3318 FERRITALLOYS	134,004	1,400	-----	122,308	10,300	-----
3319 IRON AND STEEL PRODUCT, NEC	64,562	2,793	-----	48,551	12,666	552
3321 NONFERROUS METALS, NEC	9,204	-----	-----	9,204	-----	-----
3323 LEAD AND ZINC UNWORKED	16,716	-----	-----	16,716	-----	-----
3324 ALUMINUM AND ALLOYS UNWORKED	21,137	-----	-----	21,137	-----	-----
3411 FABRICATED METAL PRODUCTS	21,944	-----	-----	21,944	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL	7,964	-----	-----	7,964	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP	2,491	-----	-----	2,491	-----	-----
3731 SHIPS AND BOATS	16	-----	-----	-----	16	-----
4011 IRON AND STEEL SCRAP	705,131	1,600	3,067	28,548	665,800	6,116
4012 NONFERROUS METAL SCRAP	1,567	-----	-----	-----	1,567	-----
4029 WASTE AND SCRAP, NEC	9,695	-----	-----	-----	9,695	-----
4111 WATER	1,200	-----	-----	-----	1,200	-----
4118 WATERWAY IMPROVEMENT MAT	31,529	-----	31,529	-----	-----	-----
TONS, ALL TRAFFIC	24,430,497	-----	-----	-----	-----	-----

## SUMMARY OF TRAFFIC, CHICAGO AREA, 1986

(SHORT TONS)

LOCALITY	TOTAL	FOREIGN				COASTWISE		DOMESTIC				LOCAL
		OVERSEAS		CANADIAN				LAKEWISE		INTERNAL		
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RE-CEIPTS	SHIP-MENTS	RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS	
BUFFINGTON HARBOR, IND.	576,176	18,908	-----	-----	129,182	-----	-----	425,306	2,800	-----	-----	-----
GARY HARBOR, IND.	3,698,910	-----	-----	-----	30,309	-----	-----	3,504,791	83,937	10,412	69,461	-----
INDIANA HARBOR, IND.	14,014,139	2,81,439	19,671	393,042	55,091	-----	-----	11,054,915	1,616,441	238,654	424,296	10,390
PORT OF CHICAGO	24,336,197	1,247,154	424,900	1,150,487	503,600	-----	-----	2,586,696	1,343,080	11,158,094	3,535,706	2,330,780
TOTAL, UNADJUSTED	42,619,742	1,517,701	444,571	1,543,529	718,182	-----	-----	17,571,708	3,046,258	11,407,160	4,029,663	2,341,170
TOTAL, NET	42,102,836	1,517,701	444,571	1,543,529	718,182	-----	-----	17,078,953	2,553,503	11,403,119	4,016,353	2,833,925

## ILLINOIS WATERWAY, ILL. (CONSOLIDATED REPORT FOR ENTIRE WATERWAY)

SECTION INCLUDED: ILLINOIS RIVER, DRAFTON, ILL. TO CONFLUENCE OF DESPLAINES AND KANKAKEE RIVERS THEN DESPLAINES RIVER TO LOCKPORT, ILL.; CHICAGO SANITARY AND SHIP CANAL, LOCKPORT, ILL. TO DAMEN AVE. IN CHICAGO; CHICAGO RIVER (SOUTH BRANCH), DAMEN AVENUE TO LAKE STREET; CALUMET-SAG CHANNEL, FROM ITS JUNCTION WITH THE CHICAGO SANITARY AND SHIP CANAL TO BLUE ISLAND; AND THE LITTLE CALUMET RIVER AND CALUMET RIVER TO TURNING BASIN NO. 5. SEE REPORTS FOR ILLINOIS RIVER, CHICAGO SANITARY AND SHIP CANAL, CALUMET-SAG CHANNEL, AND CHICAGO RIVER, SOUTH BRANCH. PROJECT DEPTH: 9 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	44,516,298	116,960	1982	42,719,065	78,122
1978	41,609,086	87,630	1983	43,513,477	67,380
1979	39,339,385	66,490	1984	39,630,784	60,060
1980	45,526,962	65,612	1985	38,530,635	100,324
1981	43,111,132	68,738	1986	41,427,158	60,696

## CHICAGO, IL. DISTRICT

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ILLINOIS WATERWAY, ILL. (CONSOLIDATED REPORT  
FOR ENTIRE WATERWAY)-CONTINUED

FREIGHT TRAFFIC, 1946

FOREIGN, COASTWISE AND LAKEWISE

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		COASTWISE		DOMESTIC LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	IMPORTS	EXPORTS
TOTAL	1,129,212	6,109	270	335,819	244,028	535,746	
IRON ORE AND CONCENTRATES	479,806					479,806	
COAL AND LUMBIT	17,987					17,987	
CRUDE PETROLEUM	6,149	6,149					
LIMESTONE	25,754					25,754	
NONMETALLIC MINERALS, NEC	13,983			13,983			
SODIUM HYDROXIDE	7,104				7,104		
NITROGENOUS CHEM. FERTILIZERS	19,222				19,222		
GASOLINE	5,936			5,936			
KEROSENE	32,236			32,236			
DISTILLATE FUEL OIL	10,538			10,538			
RESIDUAL FUEL OIL	4,279			4,279			
LUBRICATING OILS AND GREASES	71,080			71,080			
ASPHALT, PETROLEUM FLUENTS	93,885			93,885			
COAL, LUMP, AND PITCHES	32,200			32,200			
COAL, STEAM, AND PITCHES	13,836			13,836			
COAL, STEAM, AND PITCHES	23,749			23,749			
COAL, STEAM, AND PITCHES	15,399			15,399			
IRON AND STEEL PRIMARY FORMS	1,000			1,000			
IRON, STEEL SHAPES, ETC. SHEET	1,680			1,680			
MACHINERY, EXCEPT ELECTRICAL	270		270				
IRON AND STEEL SCRAP	1,680			1,680			
WATERWAY IMPROVEMENT MATER.	31,529			31,529			
TOTALS, FOREIGN, COASTWISE AND LAKEWISE	39,942,867						

INTERNAL

(SHORT TONS)

COMMODITY	TOTAL	UPROUND		DOWNROUND		UPROUND		DOWNROUND		THROUGH	
		UPROUND	DOWNROUND	UPROUND	DOWNROUND	UPROUND	DOWNROUND	UPROUND	DOWNROUND	UPROUND	DOWNROUND
TOTAL	42,227,946	10,737,392	345,760	1,275,754	17,956,176	5,240,952	1,270,616	3,375,654	2,093,442		
IRON ORE AND CONCENTRATES	479,806	1,003	18,983	7,071	8,407,343	4,738	74,744		169,497		
COAL AND LUMBIT	17,987							7,477	8,247		
CRUDE PETROLEUM	6,149	11,629			39,499	11,852					
LIMESTONE	25,754				146,830			1,574	103,542		
NONMETALLIC MINERALS, NEC	13,983				4,485,059				285,147		
SODIUM HYDROXIDE	7,104	2,838									
NITROGENOUS CHEM. FERTILIZERS	19,222	2,834									
GASOLINE	5,936	11,994						11,894			
KEROSENE	32,236	41,073						56,674			
DISTILLATE FUEL OIL	10,538	2,964						1,564			
RESIDUAL FUEL OIL	4,279	22,255						17,232			
LUBRICATING OILS AND GREASES	71,080	9,637						6,946			
ASPHALT, PETROLEUM FLUENTS	93,885	2,940,242	10,980		1,617	3,469,220		1,118,856	4,285		
COAL, LUMP, AND PITCHES	32,200	140,229			140,229						
COAL, STEAM, AND PITCHES	13,836	19,157						5,013			
COAL, STEAM, AND PITCHES	23,749	41,312			997,650	58,085	1,251,300	240,300	1,617	7,618	
COAL, STEAM, AND PITCHES	15,399							1,409			
IRON AND STEEL PRIMARY FORMS	1,000	1,502									
IRON, STEEL SHAPES, ETC. SHEET	1,680	4,903									
MACHINERY, EXCEPT ELECTRICAL	270	20,483									
IRON AND STEEL SCRAP	1,680	936,622	635,682	39,150		1,444	21,600	238,742			
WATERWAY IMPROVEMENT MATER.	31,529	56,445			27,074			29,449			
IRON AND STEEL PRIMARY FORMS	1,390,335	24,399			1,357,596			4,540			
IRON, STEEL SHAPES, ETC. SHEET	404,000	1,609			400,537			1,643			
MACHINERY, EXCEPT ELECTRICAL	75,786	60,334						15,432			
IRON AND STEEL SCRAP	26,614	98,187						14,427			
WATERWAY IMPROVEMENT MATER.	32,954	19,500	700		2,722			9,362	1,675		
IRON AND STEEL PRIMARY FORMS	1,384	1,354									
IRON, STEEL SHAPES, ETC. SHEET	10,449	3,200			2,224			5,025			
MACHINERY, EXCEPT ELECTRICAL	11,047	1,775						9,232			
IRON AND STEEL SCRAP	1,328	1,328									
WATERWAY IMPROVEMENT MATER.	934	934									
IRON AND STEEL PRIMARY FORMS	19,129	11,571						7,599			
IRON, STEEL SHAPES, ETC. SHEET	574,438	483,031	3,360		15,224	574		112,141			
MACHINERY, EXCEPT ELECTRICAL	231,256	133,235	13,568		64,512	4,150		15,791			
IRON AND STEEL SCRAP	764,230	345,903		6,971	249,647	73,692	67,821	41,144			
WATERWAY IMPROVEMENT MATER.	147,211	31,045	1,400		36,426	16,513		44,747	10,380		
IRON AND STEEL PRIMARY FORMS	1,597				1,597						
IRON, STEEL SHAPES, ETC. SHEET	1,084,472	1,046,835	114,194		20,796	15,948	11,647	34,245	14,554		
MACHINERY, EXCEPT ELECTRICAL	1,827										
IRON AND STEEL SCRAP	588,502	404,060		10,448	41,594	2,207	27,579	147,450	23,147		
WATERWAY IMPROVEMENT MATER.	199,764	177,541			2,993	17,752		1,478			
IRON AND STEEL PRIMARY FORMS	78,094	64,094		1,801		1,072		11,132			
IRON, STEEL SHAPES, ETC. SHEET	460,241	426,030			664	1,605	1,072	23,841	3,079		
MACHINERY, EXCEPT ELECTRICAL	47,342	5,736						52,814	28,442		
IRON AND STEEL SCRAP	407,382	398,207	1,400	1,847	162,922	3,762	232,800	96,234			
WATERWAY IMPROVEMENT MATER.	25,642	4,486	2,364		3,219	1,320	14,228				
IRON AND STEEL PRIMARY FORMS	50,579	28,857	1,540		18,979			6,963			
IRON, STEEL SHAPES, ETC. SHEET	909,044	216,160			247,680	197,642	247,560				
MACHINERY, EXCEPT ELECTRICAL	1,265,483	695,690	4,792	3,786	399,033	44,618	71,136	6,402			
IRON AND STEEL SCRAP	343,677	246,170			4,736	1,400		67,371			
WATERWAY IMPROVEMENT MATER.	245,614	151,343	7,231		28,662	10,869	12,754	1,355	13,556		
IRON AND STEEL PRIMARY FORMS	866,447	331,145	16,219		798,900	4,030	183,283	10,444	42,423		
IRON, STEEL SHAPES, ETC. SHEET	1,573,726	104,844	1,594	217,622	449,135	46,344	44,240	40,316	175,847		
MACHINERY, EXCEPT ELECTRICAL	4,349	1,400			1,600		3,149				

# Waterborne Commerce of the United States, 1986

ILLINOIS WATERWAY, ILL. (CONSOLIDATED REPORT  
FOR ENTIRE WATERWAY)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

INTERNAL--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	INBOUND		OUTBOUND		UPBOUND	DOWNBOUND	THROUGH	
		UPBOUND	DOWNBOUND	UPBOUND	DOWNBOUND			UPBOUND	DOWNBOUND
3241 BUILDING CEMENT-----	572,868	456,335	-----	-----	187	-----	-----	116,366	-----
3271 LIME-----	119,753	45,350	-----	-----	-----	-----	-----	62,344	12,059
3281 CRT STONE AND STONE PRODUCTS-----	7,600	7,600	-----	-----	-----	-----	-----	-----	-----
3311 PIG IRON-----	50,276	14,619	-----	-----	-----	-----	-----	34,215	1,445
3312 SLAG-----	298,089	6,030	16,445	3,536	-----	-----	-----	231,108	40,968
3314 IRON AND STEEL PRIMARY FORMS-----	350,506	45,555	1,400	-----	4,823	-----	-----	200,815	97,613
3315 IRON, STEEL SHAPES, EXC SHEET-----	676,665	99,374	18,088	-----	141,502	-----	-----	289,500	128,201
3316 IRON AND STEEL PLATES, SHEETS-----	161,700	25,767	3,894	-----	5,297	-----	-----	25,036	101,706
3317 IRON AND STEEL PIPE AND TUBE-----	57,553	26,246	1,600	-----	-----	-----	-----	29,707	-----
3318 FERROALLOYS-----	154,724	12,389	-----	-----	1,412	-----	-----	139,423	11,500
3319 IRON AND STEEL PRODUCTS, NEC-----	118,473	28,605	20,996	-----	8,922	-----	-----	19,727	40,023
332. NONFERROUS METALS, NEC-----	9,204	-----	-----	-----	-----	-----	-----	9,204	-----
3323 LEAD AND ZINC, UNMOLDED-----	16,716	3,245	-----	-----	-----	-----	-----	13,471	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	21,137	4,451	-----	-----	-----	-----	-----	16,686	-----
3411 FABRICATED METAL PRODUCTS-----	34,812	18,217	-----	-----	-----	-----	-----	16,595	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	27,353	3,574	-----	-----	16,313	-----	-----	7,461	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	3,308	-----	-----	-----	17	-----	-----	2,491	-----
3731 SHIPS AND BOATS-----	16	-----	-----	-----	-----	-----	-----	-----	-----
4011 IRON AND STEEL SCRAP-----	916,555	26,235	47,195	1,400	252,050	-----	12,410	34,195	543,070
4012 NONFERROUS METAL SCRAP-----	1,567	-----	-----	-----	-----	-----	-----	-----	1,567
4029 WASTE AND SCRAP, NEC-----	22,001	-----	-----	-----	19,029	-----	-----	-----	2,972
4111 WATER-----	1,200	-----	-----	-----	1,200	-----	-----	-----	-----
4118 WATERWAY IMPROVEMENT MAT-----	15,150	15,150	-----	-----	-----	-----	-----	-----	-----

TON-MILES, INTERNAL, 8,505,870,336.

TONS, ALL TRAFFIC, 43,427,158.

TON-MILES, ALL TRAFFIC, 8,544,919,354.

INDIANA HARBOR, IND.

SECTION INCLUDED: APPROACH CHANNEL, OUTER HARBOR AND CANAL ENTRANCE CHANNEL TO THE FIRST F. J. & E. R. R. BRIDGE; INDIANA HARBOR CANAL, INCLUDING THE CALUMET RIVER BRANCH TO COLUMBUS DRIVE BRIDGE AND THE LAKE GEORGE BRANCH TO 0.2 MILES PAST INDIANAPOLIS BLVD. PROJECT DEPTH: 29 FEET IN APPROACH CHANNEL, 29 FEET IN HARBOR BASIN, 27 FEET IN CANAL ENTRANCE CHANNEL, AND 22 FEET IN REMAINDER OF CANAL TO 0.2 MILES PAST INDIANAPOLIS BLVD. ON LAKE GEORGE BRANCH AND COLUMBUS DRIVE ON CALUMET RIVER BRANCH.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	15,958,303	1982-----	12,303,783
1978-----	20,715,602	1983-----	14,475,365
1979-----	18,418,640	1984-----	14,568,811
1980-----	16,898,932	1985-----	13,549,274
1981-----	16,374,900	1986-----	14,014,139

FREIGHT TRAFFIC, 1986

FOREIGN

(SHORT TONS)

COMMODITY	TOTAL	OVERSEAS		CANADIAN	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS
TOTAL-----	669,843	201,639	19,671	393,042	55,091
1011 IRON ORE AND CONCENTRATES-----	520,365	135,294	-----	385,071	-----
2311 APPAREL-----	4	4	-----	-----	-----
2421 LUMBER-----	9	9	-----	-----	-----
2491 WOOD MANUFACTURES, NEC-----	32	32	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	2,742	58	-----	2,684	-----
2821 PLASTIC MATERIALS-----	84	44	-----	-----	-----
2918 ASPHALT, TAR, AND BITUMENS-----	5,287	-----	-----	5,287	-----
2920 COKE, PETROLEUM COKE-----	74,762	-----	19,671	-----	55,091
3314 IRON AND STEEL PRIMARY FORMS-----	66,044	66,044	-----	-----	-----
3315 IRON, STEEL SHAPES, EXC SHEET-----	41	41	-----	-----	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	28	28	-----	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	20	20	-----	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	2	2	-----	-----	-----
3731 SHIPS AND BOATS-----	15	15	-----	-----	-----
3811 INSTR, TIME, PHOTO, OPT GOODS-----	6	6	-----	-----	-----
4112 COMMODITIES, NEC-----	2	2	-----	-----	-----

DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		INTERNAL		LOCAL
		RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS	
TOTAL-----	13,344,696	11,054,915	1,616,441	238,654	424,296	10,390
1011 IRON ORE AND CONCENTRATES-----	9,042,570	9,028,115	-----	14,455	-----	-----

## CHICAGO, IL, DISTRICT

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INDIANA HARBOR, IND.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

DOMESTIC--CONTINUED

(SHORT TONS)

COMMUNITY	TOTAL	LAKEWISE		INTERNAL		LOCAL
		RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS	
1121 COAL AND LIGNITE	4,680	-----	-----	4,680	-----	-----
1411 LIMESTONE	1,681,944	1,681,944	-----	-----	-----	-----
1494 GYPSUM, CRIME AND PLASTER	156,467	156,467	-----	-----	-----	-----
1499 NONMETALLIC MINERALS, NEC	3,187	-----	-----	3,187	-----	-----
2815 ALCOHOLS	34,957	-----	-----	34,957	-----	-----
2817 BENZENE AND TOLUENE	66,827	30,180	-----	36,647	-----	-----
2871 NITROGENOUS CHEM FERTILIZERS	20,347	-----	-----	-----	20,347	-----
2874 FERTILIZER AND MATERIALS, NEC	3,079	-----	-----	-----	3,079	-----
2911 GASOLINE	658,342	7,294	556,959	-----	91,034	3,051
2912 JET FUEL	151,117	-----	148,728	-----	2,389	-----
2913 KEROSENE	4,279	-----	4,279	-----	-----	-----
2914 DISTILLATE FUEL OIL	345,646	78,401	266,225	-----	-----	1,020
2915 RESIDUAL FUEL OIL	217,364	55,950	155,095	-----	-----	6,319
2916 LUBRICATING OILS AND GREASES	99,571	-----	32,200	-----	67,371	-----
2917 NAPHTHA, PETROLEUM SOLVENTS	13,636	11,813	2,023	-----	-----	-----
2918 ASPHALT, TAR, AND PITCHES	271,852	-----	232,727	-----	39,125	-----
3020 COKE, PETROLEUM COKE	49,093	-----	-----	32,751	16,342	-----
3312 SLAG	253,558	-----	216,605	-----	36,953	-----
3314 IRON AND STEEL PRIMARY FORMS	101,279	-----	-----	81,553	19,726	-----
3315 IRON, STEEL SHAPES, EXC SHEET	24,325	1,680	-----	2,450	19,795	-----
3316 IRON AND STEEL PLATES, SHEETS	23,988	-----	-----	-----	23,988	-----
3318 FERROALLOYS	11,525	-----	-----	11,525	-----	-----
3319 IRON AND STEEL PRODUCTS, NEC	14,372	-----	-----	-----	14,372	-----
3511 MACHINERY, EXCEPT ELECTRICAL	360	-----	-----	360	-----	-----
4011 IRON AND STEEL SCRAP	87,159	3,067	1,600	7,569	78,923	-----
4029 WASTE AND SCRAP, NEC	2,972	-----	-----	-----	2,972	-----
TOTAL, ALL TRAFFIC	14,014,139	-----	-----	-----	-----	-----

MURKIN WATERWAY HARBOR, IND.

SECTION INCLUDES: APPROACH CHANNEL, OUTER HARBOR, AND TWO HARBOR ARMS. PROJECT DEPTH: 30 FEET IN APPROACH CHANNEL, 28 FEET IN OUTER HARBOR, AND 27 FEET IN THE EAST AND WEST HARBOR ARMS.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	4,569,677	1982	5,458,420
1978	7,396,481	1983	6,332,235
1979	8,077,897	1984	8,790,770
1980	6,462,420	1985	8,178,641
1981	7,366,655	1986	6,749,674

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMUNITY	TOTAL	FOREIGN				DOMESTIC			
		OVERSEAS		CANADIAN		LAKEWISE		INTERNAL	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS
TOTAL	6,749,674	70,813	233,744	700,998	117,312	4,741,296	32,833	437,045	415,593
0100 COMMODITIES	59,096	-----	27,306	-----	-----	-----	-----	-----	31,790
0107 WHEAT	18,464	-----	-----	-----	-----	-----	-----	-----	18,464
0111 STRAW	129,100	-----	46,149	-----	28,042	-----	-----	-----	54,909
0931 MARINE SHELLS, UNMANUFACTURED	11,894	-----	-----	-----	-----	-----	-----	11,894	-----
1011 IRON ORE AND CONCENTRATES	4,766,047	-----	-----	532,884	-----	4,187,824	-----	45,339	-----
1411 LIMESTONE	500,200	-----	-----	-----	-----	500,200	-----	-----	-----
1442 SAND, GRAVEL, CRUSHED ROCK	9,035	-----	-----	-----	-----	-----	-----	1,417	7,614
1499 NONMETALLIC MINERALS, NEC	87,593	-----	-----	83,045	-----	-----	-----	4,550	-----
2022 DRIED MILK AND CREAM	2,533	-----	2,533	-----	-----	-----	-----	-----	-----
2049 GRAIN MILL PRODUCTS, NEC	8,873	-----	8,873	-----	-----	-----	-----	-----	-----
2081 ALCOHOLIC BEVERAGES	95	35	-----	60	-----	-----	-----	-----	-----
2211 BASIC TEXTILE PRODUCTS	1	1	-----	-----	-----	-----	-----	-----	-----
2311 APPAREL	2	2	-----	-----	-----	-----	-----	-----	-----
2431 VENEER, PLYWOOD, WOODEN ADORN	7,795	-----	-----	-----	-----	-----	-----	7,795	-----
2631 PAPER AND PAPERBOARD	2,720	-----	-----	-----	-----	-----	-----	2,720	-----
2711 PRINTED MATTER	3	3	-----	-----	-----	-----	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC	4,182	-----	-----	1,276	-----	-----	-----	2,906	-----
2871 NITROGENOUS CHEM FERTILIZERS	170,399	34,680	-----	-----	-----	-----	-----	135,719	-----
2872 POTASSIUM CHEM FERTILIZERS	74,228	-----	-----	74,228	-----	-----	-----	-----	-----
2873 PHOSPHATIC CHEM FERTILIZERS	12,933	-----	-----	-----	-----	-----	-----	12,933	-----
2879 FERTILIZER AND MATERIALS, NEC	19,214	-----	-----	-----	-----	-----	-----	19,214	-----
2891 MISCELLANEOUS CHEMICAL PROD	8	-----	-----	8	-----	-----	-----	-----	-----
2914 DISTILLATE FUEL OIL	8,657	-----	-----	-----	-----	8,657	-----	-----	-----
2915 RESIDUAL FUEL OIL	3,206	-----	-----	-----	-----	3,206	-----	-----	-----
2918 ASPHALT, TAR, AND PITCHES	7,184	-----	-----	-----	-----	-----	-----	7,184	-----
3020 COKE, PETROLEUM COKE	112,468	-----	-----	89,260	-----	-----	-----	3,000	20,208
3111 LEATHER AND LEATHER PRODUCTS	4	4	-----	-----	-----	-----	-----	-----	-----
3251 STRUCTURAL CLAY PRODUCTS	30	30	-----	-----	-----	-----	-----	-----	-----
3291 CUT STONE AND STONE PRODUCTS	62	62	-----	-----	-----	-----	-----	-----	-----
3311 PIG IRON	12,169	-----	-----	3,946	-----	-----	-----	8,223	-----
3312 SLAG	193,627	-----	-----	-----	-----	40,637	30,040	113,701	9,249
3314 IRON AND STEEL PRIMARY FORMS	91,270	255	15,566	-----	-----	-----	-----	9,026	66,423
3315 IRON, STEEL SHAPES, EXC SHEET	135,666	29,623	1,232	-----	-----	-----	-----	17,860	86,951

## Waterborne Commerce of the United States, 1986

HURON WATERWAY HANDBOOK, IND.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC			
		OVERSEAS		CANADIAN		LAKE/INL		INTERNAL	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	RECEIPTS	SHIPMENTS
3316 IRON AND STEEL PLATES, SHEETS--	49,813	2,056	8,483	-----	-----	772	-----	-----	33,500
3317 IRON AND STEEL PIPE AND TUBE--	3,756	2,442	-----	-----	-----	-----	-----	1,314	-----
3318 FERROALLOYS-----	23,318	-----	-----	5,535	-----	-----	-----	16,583	1,200
3319 IRON AND STEEL PRODUCTS, NEC--	42,150	-----	-----	-----	-----	-----	2,743	-----	39,357
3323 LEAD AND ZINC, UNWORKED--	276	276	-----	-----	-----	-----	-----	-----	-----
3324 ALUMINUM AND ALLOYS, UNWORKED--	576	576	-----	-----	-----	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS--	12,811	24	-----	-----	-----	-----	-----	12,787	-----
3511 MACHINERY, EXCEPT ELECTRICAL--	429	709	-----	-----	-----	-----	-----	120	-----
3611 ELECTRICAL MACH AND EQUIP--	6	6	-----	-----	-----	-----	-----	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP--	2	-----	-----	-----	2	-----	-----	-----	-----
3731 SHIPS AND BOATS--	13	13	-----	-----	-----	-----	-----	-----	-----
3911 MISC MANUFACTURED PRODUCTS--	12	12	-----	-----	-----	-----	-----	-----	-----
4011 IRON AND STEEL SCRAP--	172,297	-----	123,573	-----	-----	-----	-----	2,800	45,924
4112 COMMODITIES, NEC--	59	4	29	18	8	-----	-----	-----	-----

## CHICAGO, IL, DISTRICT

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## OTHER HARBORS AND WATERWAYS

HARBOR OR WATERWAY	COMMODITY	TONS	PASSENGERS
PROJECT			
CHICAGO HARBOR, ILL. (INCLUDED IN PORT OF CHICAGO)-----	1011 IRON ORE AND CONCENTRATES-----	25,101	-----
	1499 NONMETALLIC MINERALS, NEC-----	30,745	-----
	2920 COKE, PETROLEUM COKE-----	20,232	-----
	TOTAL-----	76,078	604,416
MICHIGAN CITY HARBOR, IND.-----	NO COMMERCE REPORTED		
NONPROJECT			
BUFFINGTON HARBOR, IND.-----	1051 ALUMINUM ORES, CONCENTRATES-----	18,681	-----
	1411 LIMESTONE-----	427,136	-----
	2914 DISTILLATE FUEL OIL-----	675	-----
	2915 RESIDUAL FUEL OIL-----	295	-----
	2920 COKE, PETROLEUM COKE-----	129,162	-----
	3011 RUBBER AND MISC PLASTIC PROD-----	13	-----
	3315 IRON, STEEL SHAPES, EXC SHEET-----	132	-----
	3317 IRON AND STEEL PIPE AND TUBE-----	14	-----
	3324 ALUMINUM AND ALLOYS, UNWORKED-----	35	-----
	3711 MOTOR VEHICLES, PARTS, EQUIP-----	33	-----
	TOTAL-----	576,196	-----
GARY HARBOR, IND.-----	1011 IRON ORE AND CONCENTRATES-----	3,359,226	-----
	1121 COAL AND LIGNITE-----	1,472	-----
	1411 LIMESTONE-----	144,099	-----
	2013 ALCOHOLS-----	2,900	-----
	2071 NITROGENOUS CHEM FERTILIZERS-----	1,400	-----
	2914 DISTILLATE FUEL OIL-----	3,455	-----
	2915 RESIDUAL FUEL OIL-----	899	-----
	2920 COKE, PETROLEUM COKE-----	52,846	-----
	3312 SLAG-----	74,857	-----
	3314 IRON AND STEEL PRIMARY FORMS-----	6,919	-----
	3315 IRON, STEEL SHAPES, EXC SHEET-----	14,201	-----
	3316 IRON AND STEEL PLATES, SHEETS-----	8,319	-----
	3317 IRON AND STEEL PIPE AND TUBE-----	1,600	-----
	3318 FERROALLOYS-----	2,800	-----
	3319 IRON AND STEEL PRODUCTS, NEC-----	1,310	-----
	4011 IRON AND STEEL SCRAP-----	22,607	-----
	TOTAL-----	3,698,910	-----

# Waterborne Commerce of the United States. 1986

## DETROIT, MI, DISTRICT

PRESQUE ISLE HARBOR, MICH.

SECTION INCLUDED: ENTIRE HARBOR. CONTROLLING AND PROJECT DEPTHS: 30 FEET IN APPROACH AND 28 FEET IN BASIN. NAVIGATION SEASON: MARCH 31 TO JANUARY 21.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	5,215,296	1982	3,363,535
1978	7,956,888	1983	5,129,565
1979	4,121,748	1984	6,848,430
1980	7,881,252	1985	7,202,744
1981	6,119,940	1986	4,761,530

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN	DOMESTIC	
		CANADIAN	LAKEWISE	
		EXPORTS	RECEIPTS	SHIPMENTS
TOTAL	4,701,530	1,731,793	720,297	2,249,439
1011 IRON ORE AND CONCENTRATES	3,988,785	1,699,346		2,249,439
1121 COAL AND LIGNITE	720,297		720,297	
1411 LIMESTONE	29,021	29,021		
2421 LUMBER	1,250	1,250		
3319 IRON AND STEEL PRODUCTS, NEC	2,177	2,177		

## MARQUETTE HARBOR, MICH.

SECTION INCLUDED: ENTIRE HARBOR. CONTROLLING DEPTHS: 24 FEET. PROJECT DEPTHS: 27 FEET. NAVIGATION SEASON: MAY 14 TO NOVEMBER 22.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	394,317	1982	175,615
1978	86,876	1983	253,951
1979	155,617	1984	180,473
1980	77,300	1985	178,318
1981	67,716	1986	356,823

## FREIGHT TRAFFIC, 1986

DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKELWISF	LOCAL
		RECEIPTS	
TOTAL	356,823	356,740	83
0911 FRESH FISH, EXCEPT SHELLFISH	83		83
1121 COAL AND LIGNITE	356,740	356,740	

## ONTONAGON HARBOR, MICH.

SECTION INCLUDED: MOUTH OF ONTONAGON RIVER, MICH. CONTROLLING DEPTHS: 12 FEET IN LAKE APPROACH, 9 FEET BETWEEN ENTRANCE PIERS, AND 5.5 FEET IN HARBOR BASIN. PROJECT DEPTHS: 17 FEET IN LAKE APPROACH AND 15 FEET BETWEEN ENTRANCE PIERS.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	9,372	1982	
1978	22	1983	90,802
1979		1984	85,740
1980	4	1985	95,035
1981		1986	265,763

## FREIGHT TRAFFIC, 1986

DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISF	
		RECEIPTS	SHIPMENTS
TOTAL	265,763	265,923	840
1121 COAL AND LIGNITE	251,893	251,893	
1411 LIMESTONE	13,030	13,030	
3411 FABRICATED METAL PRODUCTS	840		840

## DETROIT, MI, DISTRICT

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ST. MARYS RIVER, MICH.

SECTION INCLUDED: ENTIRE LENGTH OF ST. MARYS RIVER FROM LAKE SUPERIOR TO LAKE HURON, INCLUDING AMERICAN PORTS OF SAULT STE. MARIE, RABER, LIME ISLAND, DRUMMOND ISLAND, AND DETOUR, MICHIGAN.

NAME OF CANAL	PROJECT DEPTH	CONTROLLING DEPTH
GROS CAP REEFS-----	30.0	30.0
POINT IROQUOIS SHOAL CHANNEL-----	30.0	29.4
POINT IROQUOIS ANCHORAGE AREAS-----	29.0	21.0
BIRCH POINT COURSE-----	28.0-30.0	30.0
BRUSH POINT COURSE-----	28.0-30.0	
POINT LOUISE CHANNEL-----	28.0	28.0
POINT AUX PINS COURSE-----	28.0	28.0
VIDAL SHOALS CHANNEL-----	28.0	28.0
LOCKS AND CANAL (SEE REPORT FOR ST. MARYS FALL CANAL)		
BAYFIELD CHANNEL COURSE 1-----	28.0	28.0
ANCHORAGE AND MANEUVER AREA ANGLE COURSES 1 AND 2-----	28.5	28.5
LITTLE RAPIDS COURSES 2 AND 3-----	27.0	27.0
LAKE NICOLET CHANNEL-----	29.0	29.0
LAKE NICOLET ANCHORAGE-----	28.0	28.0
MIDDLE NEEBISH CHANNEL-----	27.0-28.0	27.0
WEST NEEBISH CHANNEL-----	27.5-28.5	27.5
LAKE MINUSCONG CHANNEL-----	28.0	28.0
LIME ISLAND CHANNEL-----	29.0	29.0
DETOUR PASSAGE-----	30.0	29.0
PIPE ISLAND COURSE-----	29.0	29.0
WATSON REEF COURSE-----	30.0	30.0
CRAB ISLAND-----	30.0	30.0

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TRAFFIC OF PORTS		THROUGH TRAFFIC		TOTAL	
	TONS	PASSENGERS	TONS	PASSENGERS	TONS	PASSENGERS
1977-----	2,261,497	584,620	56,060,526	-----	58,322,023	584,620
1978-----	2,736,133	580,493	84,025,435	-----	90,761,568	580,493
1979-----	2,198,618	474,830	98,882,344	-----	91,080,962	474,830
1980-----	1,559,355	568,370	72,750,692	17,852	74,310,047	606,222
1981-----	1,588,584	688,605	74,793,138	-----	76,377,762	688,605
1982-----	917,407	697,601	42,545,216	-----	43,462,623	697,601
1983-----	1,284,698	735,118	51,241,989	-----	52,526,687	735,118
1984-----	1,175,290	757,316	57,150,054	-----	60,325,354	757,316
1985-----	1,240,340	713,095	55,840,925	-----	57,081,265	713,095
1986-----	1,412,841	760,841	49,619,432	-----	51,032,673	760,841

## FREIGHT TRAFFIC, 1986

UPBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS		
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE
TOTAL-----	5,440,618	59,216	2,264,793	2,946,736	7	85,046	84,820
0133 COFFEE-----	112	112	-----	-----	-----	-----	-----
0141 FRESH AND FROZEN VEGETABLES-----	1	1	-----	-----	-----	-----	-----
1121 COAL AND LIGNITE-----	3,138,757	-----	1,535,535	1,603,222	-----	-----	-----
1411 LIMESTONE-----	1,547,293	-----	427,372	1,014,256	-----	82,435	23,230
1499 NONMETALLIC MINERALS, NEC-----	85,559	-----	49,255	36,304	-----	-----	-----
2031 FISH AND SHELLFISH, PREPARED-----	2	2	-----	-----	-----	-----	-----
2081 ALCOHOLIC BEVERAGES-----	26	26	-----	-----	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	13	13	-----	-----	-----	-----	-----
2211 BASIC TEXTILE PRODUCTS-----	5,077	5,077	-----	-----	-----	-----	-----
2421 LUMBER-----	51	-----	51	-----	-----	-----	-----
2491 WOOD MANUFACTURES, NEC-----	1	-----	-----	-----	-----	1	-----
2691 PULP AND PAPER PRODUCTS, NEC-----	1	-----	-----	-----	-----	1	-----
2819 BASIC CHEMICALS AND PMOD, NEC-----	20	20	-----	-----	-----	-----	-----
2911 GASOLINE-----	41,851	-----	-----	8,511	-----	-----	33,340
2914 DISTILLATE FUEL OIL-----	37,347	-----	-----	9,097	-----	-----	28,250
2915 REFOJIAL FUEL OIL-----	13,936	-----	13,936	-----	-----	-----	-----
2920 COKE, PETROLEUM COKE-----	81,293	-----	47,959	33,334	-----	-----	-----
2921 LIQUEFIED GASES-----	3,000	-----	3,000	-----	-----	-----	-----
3011 RUBBER AND MISC PLASTIC PROD-----	11	11	-----	-----	-----	-----	-----
3111 LEATHER AND LEATHER PRODUCTS-----	1	-----	-----	-----	-----	1	-----
3211 GLASS AND GLASS PRODUCTS-----	1	-----	-----	-----	-----	1	-----
3241 BUILDING CEMENT-----	426,111	-----	187,695	238,426	-----	-----	-----
3251 STRUCTURAL CLAY PRODUCTS-----	22	22	-----	-----	-----	-----	-----
3281 CUT STONE AND STONE PRODUCTS-----	95	95	-----	-----	-----	-----	-----
3312 SLAG-----	1,586	-----	-----	3,586	-----	-----	-----
3315 IRON, STEEL SHAPES, ETC SHEET-----	51,893	51,893	-----	-----	-----	-----	-----
3316 IRON AND STEEL PLATES, SHEETS-----	1,552	1,552	-----	-----	-----	-----	-----
3317 IRON AND STEEL PIPE AND TUBE-----	94	94	-----	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS-----	2,700	89	-----	-----	5	2,606	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	149	147	-----	-----	2	-----	-----
3611 ELECTRICAL MACH AND EQUIP-----	62	62	-----	-----	-----	-----	-----
3911 MISC MANUFACTURED PRODUCTS-----	1	-----	-----	-----	-----	1	-----

## Waterborne Commerce of the United States, 1986

ST. MARYS RIVER, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

UNANSWJND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS		
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE
TOTAL-----	45,592,055	2,882,871	4,525,017	36,941,199	45	162,591	1,080,332
0102 BARLEY AND RYE-----	364,072	239,956	144,114	-----	-----	-----	-----
0104 OATS-----	13,918	-----	13,918	-----	-----	-----	-----
0107 WHEAT-----	2,852,968	1,940,265	135,289	757,414	-----	-----	-----
0111 SOYBEANS-----	10,636	-----	10,636	-----	-----	-----	-----
0119 OILSEEDS, NEC-----	271,077	271,077	-----	-----	-----	-----	-----
0129 FIELD CROPS, NEC-----	11,087	11,087	-----	-----	-----	-----	-----
0141 FRESH AND FROZEN VEGETABLES-----	26,140	26,140	-----	-----	-----	-----	-----
1011 IRON ORE AND CONCENTRATES-----	30,992,190	21,067	2,873,348	28,097,779	-----	-----	-----
1091 NONFERROUS ORES, CONCENT, NEC-----	83,955	83,955	-----	-----	-----	-----	-----
1121 COAL AND LIGNITE-----	8,075,116	-----	8,075,116	-----	-----	-----	-----
1411 CRUDE PETROLEUM-----	6,149	-----	6,149	-----	-----	-----	-----
1411 Limestone-----	1,267,376	-----	29,021	-----	-----	158,023	1,080,332
1442 SAND, GRAVEL, CRUSHED ROCK-----	118,309	-----	118,309	-----	-----	-----	-----
1451 CLAY-----	82,812	2,808	80,004	-----	-----	-----	-----
2022 OTHER MILK AND CREAM-----	3,088	3,088	-----	-----	-----	-----	-----
2049 GRAIN MILL PRODUCTS, NEC-----	76,649	76,649	-----	-----	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	10,774	10,774	-----	-----	-----	-----	-----
2411 LOGS-----	5,018	450	-----	-----	-----	4,568	-----
2413 FUEL WOOD, CHARCOAL, WASTES-----	20	20	-----	-----	-----	-----	-----
2421 LUMBER-----	19,855	-----	19,855	-----	-----	-----	-----
2431 VENEER, PLYWOOD, MARKED WOOD-----	512	-----	512	-----	-----	-----	-----
2621 STANDARD NEWSPRINT PAPER-----	7,018	-----	7,018	-----	-----	-----	-----
2819 BASIC CHEMICALS AND PRD, NEC-----	4,207	18	4,170	-----	19	-----	-----
2831 DRUGS-----	7	-----	-----	-----	7	-----	-----
2871 NITROGENOUS CHEM FERTILIZERS-----	16,878	-----	16,878	-----	-----	-----	-----
2872 POTASSIC CHEM FERTILIZERS-----	984,774	-----	984,774	-----	-----	-----	-----
2876 INSECTICIDES, DISINFECTANTS-----	4	-----	-----	-----	4	-----	-----
2879 FERTILIZER AND MATERIALS, NEC-----	10,889	-----	10,889	-----	-----	-----	-----
2911 GASOLINE-----	5,821	-----	5,821	-----	-----	-----	-----
2914 DISTILLATE FUEL OIL-----	13,459	-----	13,459	-----	-----	-----	-----
2920 COKE, PETROLEUM COKE-----	166,109	133,862	52,247	-----	-----	-----	-----
3011 RUBBER AND MISC PLASTIC PROD-----	8	-----	-----	-----	8	-----	-----
3201 BUILDING CEMENT-----	10,050	-----	10,050	-----	-----	-----	-----
3315 IRON, STEEL SHAPES, EXC SHEET-----	1,537	-----	1,537	-----	-----	-----	-----
3319 IRON AND STEEL PRODUCTS, NEC-----	2,177	-----	2,177	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS-----	998	158	840	-----	-----	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	12	2	-----	-----	10	-----	-----
3611 ELECTRICAL MACH AND EQUIP-----	1	-----	-----	-----	1	-----	-----
4011 IRON AND STEEL SCRAP-----	36,786	30,850	5,936	-----	-----	-----	-----
4112 COMMODITIES, NEC-----	7	7	-----	-----	-----	-----	-----

TONS, ALL TRAFFIC, 51,052,873.  
TON-MILES, ALL TRAFFIC, 3,036,098,899.

ST. MARYS FALLS CANAL, MICHIGAN AND SAULT STE. MARIE,  
ONTARIO SHIP CANAL, CANADA (INCLUDED IN ST. MARYS RIVER)

SECTION INCLUDED: AMERICAN AND CANADIAN NAVIGATION CANALS AND LOCKS AT ST. MARYS FALLS, SAULT STE. MARIE, MICH. AND ONTARIO.  
CONTROLLED DEPTHS: SARV LOCK 23.1, DAVIS LOCK 23.1, MACARTHUR LOCK 31.0, POE LOCK 32.0 AND 16.8 FEET CANADIAN CANAL. PROJECT DEPTHS:  
SEE ST. MARYS RIVER.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	56,302,020	152,082	1982-----	43,624,736	105,186
1978-----	88,634,889	156,476	1983-----	52,792,424	-----
1979-----	90,499,485	113,074	1984-----	61,117,242	-----
1980-----	75,048,943	111,666	1985-----	58,074,941	-----
1981-----	77,022,752	116,532	1986-----	51,407,956	-----

## FREIGHT TRAFFIC, 1986

EASTBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC		
		FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE
TOTAL-----	46,416,131	2,882,871	6,592,061	36,941,199
0102 BARLEY AND RYE-----	364,072	239,956	144,114	-----
0104 OATS-----	13,918	-----	13,918	-----
0107 WHEAT-----	2,852,968	1,940,265	135,289	757,414
0111 SOYBEANS-----	10,636	-----	10,636	-----
0119 OILSEEDS, NEC-----	271,077	271,077	-----	-----
0129 FIELD CROPS, NEC-----	11,087	11,087	-----	-----
0141 FRESH AND FROZEN VEGETABLES-----	26,140	26,140	-----	-----
1011 IRON ORE AND CONCENTRATES-----	33,075,348	21,067	4,956,498	28,097,779
1091 NONFERROUS ORES, CONCENT, NEC-----	83,955	83,955	-----	-----
1121 COAL AND LIGNITE-----	8,075,116	-----	-----	8,075,116
1411 CRUDE PETROLEUM-----	29,021	-----	29,021	-----
1411 Limestone-----	118,309	-----	118,309	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	82,812	2,808	80,004	-----
1451 CLAY-----	-----	-----	-----	-----

## DETROIT, MI, DISTRICT

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ST. MARYS FALLS CANAL, MICHIGAN AND SAULI STE. MARIE,  
ONTARIO SHIP CANAL, CANADA (INCLUDED IN ST. MARYS RIVER)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

EASTBOUND--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC		
		FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE
2022 DRIES MILK AND CREAM-----	3,088	3,088	-----	-----
2049 GRAIN MILL PRODUCTS, NEC-----	76,649	76,649	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	10,774	10,774	-----	-----
2411 LOGS-----	450	450	-----	-----
2413 FUEL WOOD, CHARCOAL, WASTES-----	20	20	-----	-----
2421 LUMBER-----	19,855	-----	19,855	-----
2431 VEVEER, PLYWOOD, WOODEN BOUND-----	512	-----	512	-----
2621 STANDARD PAPERPRINT PAPER-----	7,014	-----	7,014	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	4,186	1A	4,170	-----
2871 NITROGENOUS CHEM FERTILIZERS-----	16,474	-----	16,476	-----
2872 POTASSIC CHEM FERTILIZERS-----	984,774	-----	984,774	-----
2879 FERTILIZER AND MATERIALS, NEC-----	10,689	-----	10,689	-----
2911 GASOLINE-----	5,821	-----	5,821	-----
2914 DISTILLATE FUEL OIL-----	13,459	-----	13,459	-----
2920 COKE, PETROLEUM COKE-----	177,685	133,422	43,423	-----
3241 BUILDING CEMENT-----	10,450	-----	-----	10,450
3319 IRON AND STEEL PRODUCTS, NEC-----	2,177	-----	2,177	-----
3411 FABRICATED METAL PRODUCTS-----	98A	15A	-----	840
3511 MACHINERY, EXCEPT ELECTRICAL-----	2	2	-----	-----
4011 IRON AND STEEL SCRAP-----	36,746	30,850	5,936	-----
4112 COMMODITIES, NEC-----	7	7	-----	-----

WESTBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC		
		FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE
TOTAL-----	4,991,825	59,216	1,971,871	2,960,738
0133 COFFEE-----	112	112	-----	-----
0141 FRESH AND FROZEN VEGETABLES-----	1	1	-----	-----
1121 COAL AND LIGNITE-----	3,138,757	-----	1,535,535	1,603,222
1411 LIMESTONE-----	1,165,759	-----	137,501	1,028,258
1499 NONMETALLIC MINERALS, NEC-----	45,559	-----	49,255	36,304
2031 FISH AND SHELLFISH, PREPARED-----	2	2	-----	-----
2081 ALCOHOLIC BEVERAGES-----	26	26	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	13	13	-----	-----
2211 BASIC TEXTILE PRODUCTS-----	5,077	5,077	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	20	20	-----	-----
2911 GASOLINE-----	8,511	-----	-----	8,511
2914 DISTILLATE FUEL OIL-----	9,097	-----	-----	9,097
2915 RESIDUAL FUEL OIL-----	13,936	-----	13,936	-----
2920 COKE, PETROLEUM COKE-----	81,293	-----	47,959	33,334
3011 RUBBER AND MISC PLASTIC PROD-----	11	11	-----	-----
3241 BUILDING CEMENT-----	426,111	-----	187,685	238,426
3251 STRUCTURAL CLAY PRODUCTS-----	22	22	-----	-----
3281 CUT STONE AND STONE PRODUCTS-----	95	95	-----	-----
3312 SLAG-----	3,586	-----	-----	3,586
3315 IRON, STEEL SHAPES, ETC SHEET-----	51,893	51,893	-----	-----
3316 IRON AND STEEL PLATES, SHEETS-----	1,552	1,552	-----	-----
3317 IRON AND STEEL PIPE AND TUBE-----	94	94	-----	-----
3411 FABRICATED METAL PRODUCTS-----	89	89	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	147	147	-----	-----
3611 ELECTRICAL MACH AND EQUIP-----	62	62	-----	-----
TONS, ALL TRAFFIC,-----	51,467,956	-----	-----	-----

DRUMMOND ISLAND, MICH. (INCLUDED IN ST. MARYS RIVER)

SECTION INCLUDED: PRIVATE LOADING DOCK ON ST. MARYS RIVER AT DRUMMOND ISLAND, MICH. CONTROLLING DEPTHS: 30 FEET TO AND FROM LAKE HURON; 27.0 FEET TO AND FROM LAKE SUPERIOR; 23 FEET AT DOCK. PROJECT DEPTH: SEE ST. MARYS RIVER.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	2,131,597	86,367	1982-----	814,730	205,856
1978-----	2,578,350	83,263	1983-----	1,130,294	223,877
1979-----	2,047,047	66,805	1984-----	1,090,809	240,302
1980-----	1,489,374	218,026	1985-----	1,187,254	209,096
1981-----	1,478,847	239,218	1986-----	1,300,619	245,059

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		CANADIAN	EXPORTS	LAKEWISE	SHIPMENTS
1411 LIMESTONE-----	1,300,619	197,057	9,228	1,094,334	-----

## Waterborne Commerce of the United States, 1986

WAYS KEEL PASSAGE, MICH.

SECTION INCLUDES: EAST CHANNEL, 3,000 FEET WIDE AND ABOUT 2 MILES LONG. CONTROLLING AND PROJECT DEPTHS: 25 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	5,374,680		1982	3,791,447	
1978	5,562,477	424	1983	3,732,013	
1979	7,690,697		1984	4,712,145	
1980	8,020,552		1985	4,600,925	
1981	5,194,510		1986	3,980,421	

## AIRPORT TRAFFIC, 1986

(ENROUTE TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC				
		FOREIGN		DOMESTIC		
		OVERSEAS	CANADIAN	NORTHBOUND	SOUTHBOUND	LAKEWIDE
TOTAL	3,980,421	1,073,611	1,278,435	7,525	1,376,394	240,456
0103 CORN	147,052	74,638	72,414			
0107 WHEAT	27,233	27,233				
0111 SOYBEANS	214,237	184,145	28,042			
0141 FRESH AND FROZEN VEGETABLES	916	916				
1051 ALUMINUM DRESS, CUNCH, STRIPS	15	15				
1121 COAL AND LIGNITE	373,851		14,961		139,024	219,866
1411 LIMESTONE	21,635				18,474	3,159
1442 SAND, GRAVEL, CRUSHED ROCK	691,097	50,635	373,750		266,712	
1451 CLAY	77,525	49,809	27,716			
1499 NONMETALLIC MINERALS, NEC	4,411	4,411				
2011 MEAT, FRESH, CHILLED, FROZEN	22	22				
2012 MEAT AND PRODUCTS, NEC	20	20				
2014 TALLOW, ANIMAL FATS AND OILS	1,135	1,135				
2015 ANIMAL BY-PRODUCTS, NEC	53	53				
2021 DAIRY PRODUCTS, NEC	726	726				
2022 DRIED MILK AND CREAM	10,968	10,968				
2044 VEGETABLES AND PREP, NEC	20	20				
2041 WHEAT FLOUR AND SEMOLINA	35,041	35,041				
2042 ANIMAL FEEDS	491	491				
2049 GRAIN MILL PRODUCTS, NEC	51,255	51,255				
2041 ALCOHOLIC BEVERAGES	17	17				
2091 VEGETABLE OILS, HAMS, SHORT	14,651	14,651				
2099 MISCELLANEOUS FOOD PRODUCTS	25,496	25,496				
2211 BASIC TEXTILE PRODUCTS	1	1				
2311 APPAREL	1,004	1,004				
2631 PAPER AND PAPERBOARD	272	272				
2691 PULP AND PAPER PRODUCTS, NEC	1	1				
2711 PRINTED MATTER	47	47				
2819 BASIC CHEMICALS AND PROD, NEC	23,697	1,505			22,192	
2821 PLASTIC MATERIALS	119	119				
2822 SYNTHETIC RUBBER	5	5				
2831 DRUGS	15	15				
2841 SOAP	33	33				
2851 PAINTS	22	22				
2861 GUM AND GUM CHEMICALS	17	17				
2871 NITROGENOUS CHEM FERTILIZERS	9,303				9,303	
2876 INSECTICIDES, DISINFECTANTS	57	57				
2891 MISCELLANEOUS CHEMICAL PROD	454	454				
2911 GASOLINE	236,595				225,616	10,979
2914 DISTILLATE FUEL OIL	125,180		7,050	7,525	100,159	10,452
2915 RESIDUAL FUEL OIL	46,151				46,151	
2916 LUBRICATING OILS AND GREASES	1	1				
2917 NAPHTHA, PETROLEUM SOLVENTS	26	26				
2919 ASPHALT, TAR, AND BITUMENS	95,101				95,101	
2920 COKE, PETROLEUM COKE	941,059	200,458	707,933		72,668	
3011 RUBBER AND MISC PLASTIC PROD	28	28				
3241 BUILDING CEMENT	316,381		7,121		309,260	
3291 MISC NONMETALLIC MINERAL PROD	40	40				
3312 SLAG	71,734				71,734	
3314 IRON AND STEEL PRIMARY FORMS	15,566	15,566				
3315 IRON, STEEL SHAPES, EXC SHEET	1,232	1,232				
3316 IRON AND STEEL PLATES, SHEETS	8,591	8,591				
3411 FABRICATED METAL PRODUCTS	98	98				
3511 MACHINERY, EXCEPT ELECTRICAL	8,029	8,029				
3611 ELECTRICAL MACH AND EQUIP	541	541				
3711 MOTOR VEHICLES, PARTS, EQUIP	152	150	2			
3731 SHIPS AND STATS	233	233				
3791 MISC TRANSPORTATION EQUIPMENT	19	19				
3811 INSTR, TIME, PHOTO, OPT GOODS	4	4				
3911 MISC MANUFACTURED PRODUCTS	6	6				
4011 IRON AND STEEL SCRAP	335,678	323,473	12,205			
4112 COMMODITIES, NEC	951	943	8			
9999 DEPARTMENT OF DEFENSE AND SCI	107	107				

# DETROIT, MI, DISTRICT

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## TRAVERSE CITY HARBOR, MICH.

SECTION INCLUDED: CITY OF TRAVERSE CITY AND THE BAY SHORE TO AND INCLUDING THE EXISTING FEDERAL PROJECT LOCATED ABOUT 1.25 MILES NORTH OF THE CITY LIMITS. CONTROLLING DEPTHS: 14 AND 10 FEET AT THE EXISTING PROJECT. PROJECT DEPTH: 14 AND 10 FEET AT THE EXISTING PROJECT. NAVIGATION SEASON: MARCH 4 TO DECEMBER 31.

### COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	430,660	1987-----	310,805
1978-----	420,212	1988-----	270,607
1979-----	318,194	1989-----	325,529
1980-----	523,314	1990-----	221,850
1981-----	341,147	1991-----	307,774

### FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN CANADIAN	DOMESTIC LAKEWISE
		IMPORTS	RECEIPTS
TOTAL-----	307,774	7,525	300,249
1121 COAL AND LIGNITE-----	33,792	-----	33,792
2911 GASOLINE-----	232,103	-----	232,103
2914 DISTILLATE FUEL OIL-----	41,879	7,525	34,354

## MANISTEE HARBOR, MICH.

SECTION INCLUDED: ENTRANCE CHANNEL AND ENTIRE AREA OF MANISTEE LAKE, INCLUDING FILER CITY. CONTROLLING DEPTHS: 24 FEET OVER THE ENTRANCE BAR, THROUGH THE OUTER BASIN AND IN THE CHANNEL BETWEEN THE PIERS; THENCE 23 FEET IN THE RIVER CHANNEL, NARROWING TO A MINIMUM WIDTH OF ABOUT 130 TO 140 FEET TO MANISTEE LAKE. PROJECT DEPTHS: 25 FEET IN THE OUTER BASIN AND 23 FEET IN THE RIVER TO MANISTEE LAKE. NAVIGATION SEASON: MARCH 30 TO DECEMBER 31.

### COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	181,468	1987-----	214,561
1978-----	183,806	1988-----	224,834
1979-----	117,423	1989-----	202,650
1980-----	185,741	1990-----	263,360
1981-----	132,300	1991-----	285,197

### FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN CANADIAN	DOMESTIC LAKEWISE
		IMPORTS	RECEIPTS
TOTAL-----	285,197	19,356	265,841
1121 COAL AND LIGNITE-----	224,278	-----	224,278
1411 LIMESTONE-----	41,563	-----	41,563
1499 NONMETALLIC MINERALS, NEC-----	19,356	19,356	-----

## LUDINGTON HARBOR, MICH.

SECTION INCLUDED: ENTRANCE CHANNEL AND ENTIRE AREA OF PERE MARQUETTE LAKE. CONTROLLING DEPTHS: 23 FEET IN THE OUTER ENTRANCE BAR DECREASING TO 20 FEET THROUGH THE OUTER BASIN AND IN THE CHANNEL TO PERE MARQUETTE LAKE. PROJECT DEPTHS: 18 FEET TO PERE MARQUETTE LAKE. NAVIGATION SEASON: APRIL 2 TO DECEMBER 31.

### COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	2,448,483	169,871	1987-----	1,190,794	86,515
1978-----	2,597,920	110,006	1988-----	659,445	87,085
1979-----	2,764,888	133,765	1989-----	1,174,955	98,676
1980-----	2,129,001	136,272	1990-----	1,075,051	85,038
1981-----	1,762,302	85,668	1991-----	720,904	85,109

### FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN OVERSEAS	DOMESTIC LAKEWISE	
		EXPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	720,904	3,309	285,507	432,088
0141 FRESH AND FROZEN VEGETABLES-----	5,542	-----	2,484	3,058
1121 COAL AND LIGNITE-----	65	-----	-----	65

## Waterborne Commerce of the United States, 1986

LUDINGTON HARBOR, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN	DOMESTIC	
		OVERSEAS	LAKEWISE	
		EXPORTS	RECEIPTS	SHIPMENTS
1411 LIMESTONE-----	159,785	-----	159,785	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	67,953	-----	6,325	61,628
1451 CLAY-----	109,875	-----	403	109,472
1499 NONMETALLIC MINERALS, NEC-----	12,503	3,309	-----	9,194
2011 MEAT, FRESH, CHILLED, FROZEN-----	251	-----	251	-----
2021 DAIRY PRODUCTS, NEC-----	4,195	-----	4,053	142
2034 VEGETABLES AND PREP, NEC-----	1,616	-----	1,616	-----
2042 ANIMAL FEEDS-----	2,874	-----	2,874	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	1,513	-----	1,513	-----
2415 PULPWOOD, LOG-----	2,971	-----	2,371	600
2421 LUMBER-----	3,797	-----	3,139	658
2431 WEEPER, PLYWOOD, WUPKED WOOD-----	2,075	-----	1,520	555
2491 WOOD MANUFACTURES, NEC-----	6,419	-----	5,479	940
2611 PULP-----	18,333	-----	6,601	11,732
2621 STANDARD NEWSPRINT PAPER-----	5,763	-----	5,622	141
2631 PAPER AND PAPERBOARD-----	102,077	-----	65,295	36,782
2819 BASIC CHEMICALS AND PROD, NEC-----	114,651	-----	-----	114,651
2822 SYNTHETIC RUBBER-----	2,307	-----	-----	2,307
2861 SOY AND SOY PRODUCTS-----	1,818	-----	1,818	-----
2873 PHOSPHATIC CHEM FERTILIZERS-----	88	-----	-----	88
2891 MISCELLANEOUS CHEMICAL PROD-----	3,917	-----	-----	3,917
2915 RESIDUAL FUEL OIL-----	2,170	-----	2,170	-----
2918 ASPHALT, TAR, AND BITUMENS-----	6,000	-----	6,000	-----
3011 RUBBER AND MISC PLASTIC PROD-----	9,455	-----	-----	9,455
3251 BUILDING CEMENT-----	22,350	-----	-----	22,350
3251 STRUCTURAL CLAY PRODUCTS-----	43,790	-----	389	43,401
3241 CUT STONE AND STONE PRODUCTS-----	555	-----	391	164
3291 MISC NONMETALLIC MINERAL PROD-----	400	-----	-----	400
3411 FABRICATED METAL PRODUCTS-----	218	-----	-----	218
3911 MISC MANUFACTURED PRODUCTS-----	2,343	-----	2,273	70
4112 COMMODITIES, NEC-----	3,235	-----	3,135	100

MUSKEGON HARBOR, MICH.

SECTION INCLUDED: ENTRANCE CHANNEL AND ENTIRE AREA OF MUSKEGON LAKE. CONTROLLING DEPTHS: 29.0 FEET THROUGH THE OUTER PORTION OF PROJECT AND 27 FEET IN CHANNEL TO MUSKEGON LAKE. PROJECT DEPTHS: VARYING FROM 29.0 FEET AT HARBOR ENTRANCE TO 28 FEET BETWEEN BREAKWATERS AND 27 FEET IN INNER CHANNEL. NAVIGATION SEASON: APRIL 7 TO DECEMBER 31.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	1,912,425	-----	1982-----	1,153,336	-----
1978-----	1,952,876	-----	1983-----	932,129	-----
1979-----	1,906,688	-----	1984-----	1,303,734	-----
1980-----	1,235,315	-----	1985-----	773,581	-----
1981-----	1,156,499	-----	1986-----	1,192,780	-----

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS		LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	SHIPMENTS
TOTAL-----	1,192,780	8,297	60,125	14,160	1,099,819
1121 COAL AND LIGNITE-----	889,148	-----	-----	889,148	-----
1411 LIMESTONE-----	8,628	-----	-----	5,677	2,771
1499 NONMETALLIC MINERALS, NEC-----	1,102	-----	1,102	-----	-----
2871 NITROGENOUS CHEM FERTILIZERS-----	37,172	-----	-----	37,172	-----
2911 GASOLINE-----	60,210	-----	-----	54,352	5,858
2914 DISTILLATE FUEL OIL-----	27,780	-----	-----	27,780	-----
2918 ASPHALT, TAR, AND BITUMENS-----	1,750	-----	-----	-----	1,750
3241 BUILDING CEMENT-----	85,510	-----	-----	85,510	-----
3311 PIG IRON-----	14,160	-----	-----	14,160	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	8,297	8,297	-----	-----	-----
4011 IRON AND STEEL SCRAP-----	59,023	-----	59,023	-----	-----

GRAND HAVEN HARBOR AND GRAND RIVER, MICH.

SECTION INCLUDED: ENTIRE HARBOR, INCLUDING FERRYSBURG AND SPRING LAKE AND GRAND RIVER FROM GRAND TRUNK RY. BRIDGE AT FERRYSBURG TO BASS RIVER ABOUT 15 MILES. CONTROLLING DEPTHS: 22 FEET IN ENTRANCE CHANNEL; 21 FEET TO THE MOUTH OF THE SOUTH CHANNEL; 19 FEET TO THE SAG; 20 FEET TO GRAND TRUNK RY. BRIDGE AT FERRYSBURG; 17 FEET IN THE TURNING BASIN; 17 FEET IN CHANNEL TO SPRING LAKE; THENCE 8 FEET TO MILE 17.0 AND 5 FEET TO THE END OF THE PROJECT. PROJECT DEPTHS: 23 FEET IN ENTRANCE CHANNEL; 21 FEET TO FERRYSBURG; 18 FEET IN CHANNEL TO SPRING LAKE; 8 FEET TO MOUTH OF BASS RIVER; MISCELLANEOUS SHOALS IN THE TURNING BASIN. NAVIGATION SEASON: MARCH 1 TO DECEMBER 31.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	499,510	1982-----	479,311
1978-----	701,717	1983-----	1,056,419
1979-----	1,009,966	1984-----	1,358,439
1980-----	585,202	1985-----	1,455,412
1981-----	430,087	1986-----	1,377,201

# DETROIT, MI, DISTRICT

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GRAND HAVEN HARBOR AND GRAND RIVER, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN	EXPORTS	LAKEWISE
		EXPORTS	IMPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	1,377,201	54,282	171,754	326,705	566,936
1121 COAL AND LIGNITE-----	116,921	-----	-----	-----	116,921
1411 LIMESTONE-----	185,024	-----	-----	-----	18,478
1442 SAND, GRAVEL, CRUSHED ROCK-----	663,816	50,632	31,588	326,705	16,381
1451 CLAY-----	3,650	-----	-----	-----	238,090
1499 NONMETALLIC MINERALS, NEC-----	136,956	-----	107,711	-----	29,245
2872 POTASSIC CHEM FERTILIZERS-----	28,046	-----	28,046	-----	-----
2913 KEROSENE-----	6,259	-----	-----	-----	6,259
2914 DISTILLATE FUEL OIL-----	4,447	-----	4,447	-----	-----
3241 BUILDING CEMENT-----	94,117	-----	-----	-----	94,117
3311 PIG IRON-----	960	-----	-----	-----	960
3312 SLAG-----	135,003	-----	-----	-----	135,003

HOLLAND HARBOR, MICH.

SECTION INCLUDED: ENTRANCE CHANNEL 25 FEET DEEPEASING TO 21 FEET DEEP AT THE OUTER END OF THE INNER PIERS; THENCE A CHANNEL TO AND THROUGH LAKE MACATAWA TO THE WHARVES IN HOLLAND, MICHIGAN; A TURNING BASIN 18 FEET DEEP; A CHANNEL IN BLACK RIVER 21 FEET DEEP AND A SETTLING BASIN ABOVE THE BLACK RIVER CHANNEL TO THE STATE STREET BRIDGE. NAVIGATION SEASON: MARCH 13 TO DECEMBER 31.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	377,122	1982-----	209,365
1978-----	419,916	1983-----	353,738
1979-----	451,492	1984-----	298,773
1980-----	263,177	1985-----	456,506
1981-----	263,974	1986-----	419,702

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE
		EXPORTS	EXPORTS	RECEIPTS
TOTAL-----	419,702	21,207	56,647	341,848
1121 COAL AND LIGNITE-----	183,235	-----	-----	183,235
1411 LIMESTONE-----	62,401	-----	-----	62,401
1442 SAND, GRAVEL, CRUSHED ROCK-----	47,045	-----	47,045	-----
3312 SLAG-----	96,212	-----	-----	96,212
4011 IRON AND STEEL SCRAP-----	30,809	21,207	9,602	-----

ST. JOSEPH HARBOR, MICH.

SECTION INCLUDED: ENTRANCE CHANNEL AND LOWER PORTION OF ST. JOSEPH RIVER TO AND INCLUDING BENTON HARBOR CANAL. CONTROLLING DEPTH: 24 FEET AT ENTRANCE; 24 FEET BETWEEN ENTRANCE PIERS AND IN THE RIVER TO THE MOUTH OF THE PAW PAW RIVER; WITH 1 FOOT OF SHOALING ALONG THE CHANNEL LIMITS; 17 FEET IN THE TURNING BASIN; AND 18 FEET AT BENTON HARBOR CANAL. PROJECT DEPTHS: 21 FEET AT ENTRANCE, AND IN CHANNEL AND RIVER TO THE MOUTH OF THE PAW PAW RIVER; 18 FEET IN TURNING BASINS AND THE BENTON HARBOR CANAL. NAVIGATION SEASON: MARCH 7 TO DECEMBER 31.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	308,441	1982-----	270,254
1978-----	320,633	1983-----	243,348
1979-----	443,895	1984-----	330,042
1980-----	445,889	1985-----	390,330
1981-----	429,216	1986-----	432,818

FREIGHT TRAFFIC, 1986

DOMESTIC

(SHORT TONS)

COMMODITY	LAKEWIDE
	RECEIPTS
TOTAL-----	432,818
1411 LIMESTONE-----	235,774
2918 ASPHALT, TAR, AND BITUMENS-----	28,000
3241 BUILDING CEMENT-----	158,844
3271 LIME-----	1,608
3312 SLAG-----	12,592

## Waterborne Commerce of the United States, 1986

ATLWAKEE MARSH, WIS.

SECTION INCLUDED: LAKE APPROACH CHANNEL, OUTER HARBOR, MILWAUKEE RIVER TO BUFFALO STREET, LOWER 2 MILES OF MENOMONEE RIVER, LOWER 2 MILES OF KENOSHA RIVER AND SOUTH MENOMONEE AND RUPPACH CANALS, CONTROLLING AND PROJECT DEPTHS: 30 FEET IN LAKE APPROACH CHANNEL, 28 FEET IN THE ENTRANCE CHANNEL AND THE SOUTH OUTER HARBOR, 21 FEET IN THE NORTH OUTER HARBOR, 27 FEET IN THE KENOSHA RIVER TO THE CHICAGO AND NORTH WESTERN RAILWAY BRIDGE AT MILE 1.0, THENCE 21 FEET TO SOUTH KENOSHA AVENUE BRIDGE; 27 FEET IN ATLWAKEE RIVER TO THE CHICAGO AND NORTH WESTERN RAILWAY BRIDGE AT MILE 0.21, THENCE 21 FEET TO EAST BUFFALO STREET BRIDGE; 21 FEET IN MENOMONEE RIVER AND SOUTH MENOMONEE AND RUPPACH CANALS.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	3,945,382	110,455	1987-----	2,249,033	89,180
1978-----	4,497,949	113,381	1988-----	2,740,575	109,294
1979-----	4,572,800	101,000	1989-----	2,993,065	167,424
1980-----	4,079,506	97,091	1990-----	2,489,684	101,652
1981-----	3,000,454	72,494	1991-----	1,823,143	73,478

## FREIGHT TRAFFIC, 1990

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC		LOCAL
		OVERSEAS		CANADIAN		LAKEWISE		
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	
TOTAL-----	1,823,143	54,664	219,020	445,799	52,469	1,008,899	35,258	6,440
1103 CORN-----	27,420	-----	2,091	-----	25,235	-----	-----	-----
1107 WHEAT-----	27,233	-----	-----	-----	27,233	-----	-----	-----
1141 FRESH AND FROZEN VEGETABLES-----	846	-----	846	-----	-----	-----	-----	-----
1051 ALUMINUM ORES, CONCENTRATES-----	1	1	-----	-----	-----	-----	-----	-----
1121 COAL AND LIGNITE-----	482,037	-----	-----	-----	-----	482,037	-----	-----
1411 LIMESTONE-----	36,326	-----	-----	-----	-----	36,326	-----	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	36,562	-----	5	-----	-----	36,559	-----	-----
1499 NONMETALLIC MINERALS, NEC-----	459,357	-----	-----	392,825	-----	66,532	-----	-----
2014 TALLOW, ANIMAL FATS AND OILS-----	238	-----	238	-----	-----	-----	-----	-----
2021 DAIRY PRODUCTS, NEC-----	726	-----	726	-----	-----	-----	-----	-----
2022 DRIED MILK AND CREAM-----	8,051	-----	8,051	-----	-----	-----	-----	-----
2039 PREP FRUIT AND VEG JUICE, NEC-----	27	27	-----	-----	-----	-----	-----	-----
2041 WHEAT FLOUR AND SEMOLINA-----	30,227	-----	30,227	-----	-----	-----	-----	-----
2049 GRAIN MILL PRODUCTS, NEC-----	23,714	-----	23,714	-----	-----	-----	-----	-----
2081 ALCOHOLIC BEVERAGES-----	377	377	-----	-----	-----	-----	-----	-----
2091 VEGETABLE OILS, MARG, SHORT-----	11,920	-----	11,920	-----	-----	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	16,897	12	16,897	-----	-----	-----	-----	-----
2211 BASIC TEXTILE PRODUCTS-----	5,594	5,594	-----	-----	-----	-----	-----	-----
2311 APPAREL-----	1,003	-----	1,003	-----	-----	-----	-----	-----
2511 FURNITURE AND FIXTURES-----	5	5	-----	-----	-----	-----	-----	-----
2631 PAPER AND PAPERBOARD-----	270	-----	270	-----	-----	-----	-----	-----
2711 PRINTED MATTER-----	41	1	40	-----	-----	-----	-----	-----
2811 CRUDE TAR, OIL, GAS PRODUCTS-----	2,256	1	-----	2,255	-----	-----	-----	-----
2813 ALCOHOLS-----	1	1	-----	-----	-----	-----	-----	-----
2817 BENZENE AND TOLUENE-----	2,255	-----	-----	2,255	-----	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	390	7	389	-----	-----	-----	-----	-----
2821 PLASTIC MATERIALS-----	20	-----	20	-----	-----	-----	-----	-----
2841 SOAP-----	33	-----	33	-----	-----	-----	-----	-----
2851 PAINTS-----	1	1	-----	-----	-----	-----	-----	-----
2861 GUM AND WOOD CHEMICALS-----	17	-----	17	-----	-----	-----	-----	-----
2871 NITROGENOUS CHEM FERTILIZERS-----	25,111	17,075	-----	-----	8,036	-----	-----	-----
2891 MISCELLANEOUS CHEMICAL PROD-----	30	-----	30	-----	-----	-----	-----	-----
2911 GASOLINE-----	13,994	-----	-----	-----	6,997	6,997	-----	-----
2914 DISTILLATE FUEL OIL-----	8,471	-----	-----	8,471	-----	-----	-----	-----
2915 REFORMED FUEL OIL-----	13,844	-----	-----	-----	13,844	-----	-----	-----
2919 ASPHALT, TAR, AND BITUMENS-----	28,000	-----	-----	-----	-----	28,000	-----	-----
3011 RUBBER AND MISC PLASTIC PROD-----	25	5	22	-----	-----	-----	-----	-----
3241 BUILDING CEMENT-----	357,757	-----	-----	-----	-----	357,757	-----	-----
3281 CUT STONE AND STONE PRODUCTS-----	141	141	-----	-----	-----	-----	-----	-----
3311 PIG IRON-----	39,337	-----	-----	39,337	-----	-----	-----	-----
3314 IRON AND STEEL PRIMARY FORMS-----	1,069	1,069	-----	-----	-----	-----	-----	-----
3315 IRON, STEEL SHAPES, EXC SHEET-----	28,833	28,833	-----	-----	-----	-----	-----	-----
3316 IRON AND STEEL PLATES, SHEETS-----	85	-----	85	-----	-----	-----	-----	-----
3317 IRON AND STEEL PIPE AND TUBE-----	863	863	-----	-----	-----	-----	-----	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	8	8	-----	-----	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS-----	6	6	-----	-----	-----	-----	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	7,673	482	6,930	-----	-----	261	-----	-----
3611 ELECTRICAL MACH AND EQUIP-----	506	21	487	-----	-----	-----	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	109	68	41	-----	-----	-----	-----	-----
3731 SHIPS AND BOATS-----	233	-----	233	-----	-----	-----	-----	-----
3791 MISC TRANSPORTATION EQUIPMENT-----	19	-----	19	-----	-----	-----	-----	-----
3811 INSTR, TIME, PHOTO, OPT GOODS-----	1	-----	1	-----	-----	-----	-----	-----
3911 MISC MANUFACTURED PRODUCTS-----	70	66	4	-----	-----	-----	-----	-----
4011 IRON AND STEEL SCRAP-----	112,734	-----	112,734	-----	-----	-----	-----	-----
4012 NONFERROUS METAL SCRAP-----	1,656	-----	-----	1,656	-----	-----	-----	-----
4112 COMMODITIES, NEC-----	877	2	875	-----	-----	-----	-----	-----
4118 WATERWAY IMPROVEMENT MAT-----	6,440	-----	-----	-----	-----	-----	-----	6,440
9999 DEPARTMENT OF DEFENSE AND SCI-----	40	-----	40	-----	-----	-----	-----	-----

# DETROIT, MI, DISTRICT

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PORT WASHINGTON HARBOR, WIS.

SECTION INCLUDES: OUTER HARBOR AND INTERIOR BASINS. CONTROLLING AND PROJECT DEPTHS: 21 FEET IN THE ENTRANCE CHANNEL AND OUTER TURNING BASIN; 19 FEET IN INNER BASINS.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	686,587	1982-----	664,273
1978-----	577,701	1983-----	651,654
1979-----	788,665	1984-----	382,645
1980-----	873,574	1985-----	241,281
1981-----	442,920	1986-----	293,363

## FREIGHT TRAFFIC, 1986

### DOMESTIC

(SHORT TONS)

COMMODITY	LAKEWISE RECEIPTS
1121 COAL AND LIGNITE-----	293,363

SHEBOYGAN HARBOR, WIS.

SECTION INCLUDES: OUTER HARBOR AND LOWER 1.0 MILES OF RIVER. CONTROLLING AND PROJECT DEPTHS: 25 FEET IN ENTRANCE CHANNEL; 21-25 FEET IN THE TURNING BASIN; 21 FEET IN THE RIVER CHANNEL TO MARYLAND AVENUE; 15 FEET TO JEFFERSON AVENUE. NAVIGATION SEASON: 9 APRIL TO 30 DECEMBER.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	163,253	1982-----	148,219
1978-----	265,079	1983-----	126,534
1979-----	313,594	1984-----	1,257,861
1980-----	167,576	1985-----	1,095,005
1981-----	119,044	1986-----	920,509

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN CANADIAN	DOMESTIC LAKEWISE	
		IMPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	920,509	31,355	406,317	482,837
1121 COAL AND LIGNITE-----	844,139	-----	401,302	482,837
1499 NONMETALLIC MINERALS, NEC-----	31,355	31,355	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	5,015	-----	5,015	-----

MANITOWIC HARBOR, WIS.

SECTION INCLUDES: OUTER HARBOR AND LOWER 2 MILES OF RIVER. CONTROLLING AND PROJECT DEPTHS: 21 FEET IN THE LAKE APPROACH CHANNEL, THE OUTER HARBOR, AND IN THE RIVER CHANNEL TO THE THIRD RAILWAY BRIDGE.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	739,643	68,673	1982-----	264,893	176
1978-----	658,517	34,320	1983-----	232,986	-----
1979-----	740,358	65,109	1984-----	274,549	-----
1980-----	744,427	69,555	1985-----	190,593	-----
1981-----	846,676	66,514	1986-----	304,382	-----

## FREIGHT TRAFFIC, 1986

### DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE		LOCAL
		RECEIPTS	SHIPMENTS	
TOTAL-----	304,382	208,737	12,286	83,359
1121 COAL AND LIGNITE-----	59,975	59,975	-----	-----
1411 LIMESTONE-----	7,000	2,903	4,997	-----
1402 SAND, GRAVEL, CRUSHED ROCK-----	4,013	-----	4,013	-----
2920 COKE, PETROLEUM COKE-----	23,497	23,497	-----	-----
3241 BUILDING CEMENT-----	122,362	122,362	-----	-----
3315 IRON, STEEL SHAPES, EXC SHEET-----	3,276	-----	3,276	-----
9118 WATERWAY IMPROVEMENT MAT-----	83,359	-----	-----	83,359

## Waterborne Commerce of the United States, 1986

Kewaunee Harbor, Wis.

SECTION INCLUDED: OUTER HARBOR, INNER BASIN AND NORTH BASIN. CONTROLLING AND PROJECT DEPTHS: 20 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	876,095	50,436	1982	1,051,157	87,946
1978	956,015	44,100	1983	1,824,424	69,727
1979	1,802,964	32,639	1984	320,224	75,336
1980	1,120,754	39,565	1985	437,753	85,038
1981	1,273,942	71,666	1986	192,248	85,109

## FREIGHT TRAFFIC, 1986

## DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEFATSE	
		RECEIPTS	SHIPMENTS
TOTAL	192,248	273,740	114,504
0141 FRESH AND FROZEN VEGETABLES	5,542	3,058	2,484
1121 COAL AND LIGNITE	65	65	65
1411 Limestone	7,404	7,404	7,404
1402 SAND, GRAVEL, CRUSHED ROCK	6,765	460	6,325
1451 CLAY	109,875	109,472	403
1499 NONMETALLIC MINERALS, NEC	9,194	9,194	9,194
2011 MEAT, FRESH, CHILLED, FROZEN	251	251	251
2021 DAIRY PRODUCTS, NEC	4,195	142	4,053
2034 VEGETABLES AND PREP, NEC	1,616	1,616	1,616
2042 ANIMAL FEEDS	2,874	2,874	2,874
2099 MISCELLANEOUS FOOD PRODUCTS	1,513	1,513	1,513
2415 PULPWOOD, LOG	2,971	604	2,371
2421 LUMBER	3,747	658	3,139
2431 VEVEER, PLYWOOD, WORKED WOOD	2,075	555	1,520
2491 WOOD MANUFACTURES, NEC	6,419	940	5,479
2611 PULP	18,333	11,732	6,601
2621 STANDARD NEWSPRINT PAPER	5,763	141	5,622
2631 PAPER AND PAPERBOARD	102,077	36,782	65,295
2819 BASIC CHEMICALS AND PROD, NEC	9,817	9,817	9,817
2822 SYNTHETIC RUBBER	2,307	2,307	2,307
2861 GUM AND WOOD CHEMICALS	1,818	1,818	1,818
2873 PHOSPHATIC CHEM FERTILIZERS	88	88	88
2891 MISCELLANEOUS CHEMICAL PROD	3,917	3,917	3,917
3011 RUBBER AND MISC PLASTIC PROD	9,455	9,455	9,455
3241 BUILDING CEMENT	22,350	22,350	22,350
3251 STRUCTURAL CLAY PRODUCTS	43,790	43,401	389
3281 CRT STONE AND STONE PRODUCTS	555	164	391
3291 MISC NONMETALLIC MINERAL PROD	400	400	400
3312 SLAG	956	956	956
3315 IRON, STEEL SHAPES, EXC SHEET	250	250	250
3411 FABRICATED METAL PRODUCTS	218	218	218
3911 MISC MANUFACTURED PRODUCTS	2,345	70	2,275
4112 COMMODITIES, NEC	3,235	100	3,135

GREEN BAY HARBOR, WIS.

SECTION INCLUDED: OUTER CHANNEL, CHANNEL THROUGH THE CITY OF GREEN BAY AND UPPER RIVER CHANNEL TO CITY OF DE PERE. CONTROLLING AND PROJECT DEPTHS: 26 FEET IN OUTER CHANNEL TO GRASSY ISLAND; 24 FEET IN THE ENTRANCE CHANNEL AND RIVER CHANNEL TO A POINT 1,700 FEET UPSTREAM FROM THE C. &amp; N. W. R. R. BRIDGE; 24 FEET IN THE TURNING BASIN AT THE MOUTH OF THE EAST RIVER; 20 FEET IN THE TURNING BASIN ABOVE THE C. &amp; N. W. R. R. BRIDGE; 18 FEET IN THE UPPER RIVER CHANNEL AND TURNING BASIN AT THE CITY OF DE PERE.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	2,476,716	1982	2,030,832
1978	2,457,924	1983	2,440,974
1979	2,839,326	1984	2,422,674
1980	2,299,001	1985	2,295,721
1981	1,979,865	1986	2,199,701

\* PASSENGERS--30,150.

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC
		OVERSEAS		CANADIAN		LAKELWSE
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS
TOTAL-----	2,199,701	94,864	42,081	110,203	7,383	1,945,170
1011 IRON ORE AND CONCENTRATES-----	12,676	-----	-----	12,676	-----	-----
1121 COAL AND LIGNITE-----	1,430,723	-----	-----	-----	-----	1,430,723
1411 LIMESTONE-----	203,204	-----	-----	-----	-----	203,204
1499 NONMETALLIC MINERALS, NEC-----	105,836	-----	-----	75,581	-----	30,255
2014 TALLOW, ANIMAL FATS AND OILS-----	12,226	-----	12,226	-----	-----	-----
2022 DRIED MILK AND CREAM-----	26,642	-----	26,642	-----	-----	-----
2049 GRAIN MILL PRODUCTS, NEC-----	1,995	-----	1,995	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	583	-----	583	-----	-----	-----

# DETROIT, MI, DISTRICT

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GREEN BAY HARBOR, WIS.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC
		OVERSEAS		CANADIAN		LAKEWISE
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS
2611 PULP--CHEMICALS AND PROD, NEC-----	94,275	93,681	594	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	7,383	-----	-----	-----	7,383	-----
2873 PHOSPHATIC CHEM FERTILIZERS-----	88	-----	88	-----	-----	-----
2914 DISTILLATE FUEL OIL-----	21,946	-----	-----	21,946	-----	-----
2918 ASPHALT, TAR, AND PITCHES-----	43,630	-----	-----	-----	-----	43,630
2920 COKE, METALLURGICAL COKE-----	15,815	-----	-----	-----	-----	15,815
3241 BUILDING CEMENT-----	218,545	-----	-----	-----	-----	218,545
3411 FABRICATED METAL PRODUCTS-----	4	4	-----	-----	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	1,166	1,166	-----	-----	-----	-----
3611 ELECTRICAL MACH AND EQUIP-----	15	13	2	-----	-----	-----
4112 COMMODITIES, NEC-----	1	-----	1	-----	-----	-----

STURGEON BAY AND LAKE MICHIGAN SHIP CANAL, WIS.

SECTION INCLUDES: ENTIRE CANAL AND CONNECTING WATERS BETWEEN LAKE MICHIGAN AND GREEN BAY, THROUGH THE CITY OF STURGEON BAY, WIS. CONTROLLING AND PROJECT DEPTHS: 21 FEET IN LAKE MICHIGAN ENTRANCE TO CANAL, 27 FEET IN REVELTED CANAL AND IN CHANNEL THROUGH STURGEON BAY AND 20 FEET IN TURNING BASIN.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	113,645	2,658	1982-----	162,525	2,406
1978-----	144,810	2,274	1983-----	258,455	1,475
1979-----	69,189	1,480	1984-----	102,194	3,204
1980-----	36,801	6,624	1985-----	175,083	4,078
1981-----	42,631	2,290	1986-----	469,644	3,316

FREIGHT TRAFFIC, 1986

DOMESTIC

(SHORT TONS)

COMMODITY	TOTAL	LAKEWISE	
		RECEIPTS	NORTHBOUND
TOTAL-----	469,644	3,982	465,662
1011 IRON ORE AND CONCENTRATES-----	85,935	-----	85,935
1121 COAL AND LIGNITE-----	315,324	-----	315,324
1411 LIMESTONE-----	37,717	-----	37,717
2918 ASPHALT, TAR, AND PITCHES-----	26,686	-----	26,686
3312 SLAG-----	956	956	-----
3315 INJN, STEEL SHAPES, EXC SHEET-----	3,026	3,026	-----

ALPENA HARBOR, MICH.

SECTION INCLUDES: LOWER 4,000 FEET OF RIVER AND PRIVATE HARBORS NORTH OF MOUTH OF THUNDER BAY RIVER. CONTROLLING DEPTHS: 21 FEET IN THE BAY SECTION; 17 FEET IN RIVER; 15 FEET IN TURNING BASIN. PROJECT DEPTHS: CHANNEL 24 FEET DEEP FROM THAT DEPTH IN THUNDER BAY TO A POINT 2,500 FEET LAKEWARD OF THE LIGHTHOUSE; THENCE 23 FEET IN RIVER NARROWING TO 100-FOOT WIDTH AT A POINT 700 FEET UPSTREAM FROM THE LIGHTHOUSE; THENCE 100 FEET WIDE AND 22 FEET DEEP TO THE SECOND AVE. BRIDGE; THENCE 18.5 FEET DEEP AND 75 FEET WIDE TO THE UPPER LIMITS OF THE PROJECT; A TURNING BASIN 15 FEET DEEP BY 3.7 ACRES AT THE UPPER END OF PROJECT; AND A TURNING BASIN 19 FEET DEEP AT THE RIVER MOUTH. NAVIGATION SEASON: MARCH 15 TO DECEMBER 17.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	3,004,934	1982-----	1,821,190
1978-----	3,203,682	1983-----	2,178,305
1979-----	2,942,149	1984-----	2,423,224
1980-----	2,737,036	1985-----	2,382,346
1981-----	2,170,676	1986-----	2,393,224

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN			DOMESTIC	
		OVERSEAS	CANADIAN		LAKEWISE	
		IMPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	2,393,224	55	1,987	183,671	265,940	1,941,571
1011 IRON ORE AND CONCENTRATES-----	5,724	-----	-----	-----	5,724	-----
1121 COAL AND LIGNITE-----	202,876	-----	-----	-----	202,876	-----
1411 LIMESTONE-----	142,138	-----	-----	139,133	3,005	-----
1451 CLAY-----	7,620	-----	-----	7,620	-----	-----
1494 GYPSUM, CRUDE AND PLASTERS-----	29,621	-----	-----	29,621	-----	-----
1499 NONMETALLIC MINERALS, NEC-----	44,323	38	-----	-----	44,285	-----
2911 GASOLINE-----	1,987	-----	1,987	-----	-----	-----
3211 BUILDING CEMENT-----	1,958,918	-----	-----	7,297	10,050	1,941,571
3511 MACHINERY, EXCEPT ELECTRICAL-----	17	17	-----	-----	-----	-----

## Waterborne Commerce of the United States, 1986

## SAGINAW RIVER, MICH.

SECTION INCLUDED: FROM THE MOUTH OF THE RIVER TO AND INCLUDING SAGINAW, MICHIGAN. CONTROLLING DEPTHS: 27 FEET FROM THE 75 FOOT CONTAIN IN SAGINAW BAY TO 14 FEET AT THE RIVER MOUTH & 5 FEET MISC. SHOALING ALONG CHANNEL LIMITS; THENCE 24 FEET TO THE PENN CENTRAL R.R. BRIDGE; THENCE 22 FEET TO THE C&O R.R. BRIDGE IN SAGINAW, MICHIGAN; THENCE 14 FEET TO THE HOLLAND STREET BRIDGE; THENCE ABOUT 7 FEET OVER A WIDTH OF 100 FEET UPSTREAM TO GREEN POINT. CONTROLLING DEPTHS IN TURNING BASINS ARE: ESSEXVILLE - 19 AND 24 FEET; AIRPORT - 21 FEET; CARROLLTON - 19 FEET; SIXTH STREET - 20 FEET; BASIN AT 19 MILE POINT - 15 FEET. PROJECT DEPTHS: 27 FEET FROM THE DEFWATER IN SAGINAW BAY TO THE RIVER MOUTH; 2 TO 3 FEET OF SHOALING ALONG THE CHANNEL LIMITS FROM THE ST & T.W.R. BRIDGE TO MILE 7 IN THE BAY SECTION; THENCE 26 FEET FOR 0.1 MILES; THENCE 25 FEET TO THE PENN CENTRAL R.R. BRIDGE; THENCE 22 FEET TO THE C&O R.R. BRIDGE IN SAGINAW; THENCE 16.5 FEET TO THE UPSTREAM LIMIT AT GREEN POINT. 20 AND 25 FEET IN ESSEXVILLE TURNING BASIN; 22 FEET IN THE AIRPORT TURNING BASIN; 20 FEET IN THE CARROLLTON TURNING BASIN; 20 FEET IN THE SIXTH STREET TURNING BASIN AND 15 FEET IN THE TURNING BASIN AT THE 19 MILE POINT. NAVIGATION SEASON: MARCH 26 TO DECEMBER 31.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	3,656,238	1982	1,609,792
1978	3,173,573	1983	2,345,719
1979	4,046,126	1984	2,541,884
1980	3,081,260	1985	3,902,667
1981	2,593,591	1986	3,217,114

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		CANADIAN		DOMESTIC LAKEWISE	
		OVERSEAS					
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS
TOTAL	3,917,116	21,047	5,997	290,279	71,021	3,485,966	53,286
0103 CORN	5,460				5,460		
1121 COAL AND LIGNITE	543,412					543,412	
1401 LIMESTONE	2,615,271				65,161	2,550,110	
1402 SAND, GRAVEL, CRUSHER WORN	262,006			39,284		223,322	
1499 MINERAL PRODUCTS, NEC	18,761			18,761			
2005 FERTILIZERS	57	57					
2211 BASIC FERTILE PRODUCTS	2,159	2,159					
2915 ALCOHOLS	930		930				
2919 BASIC CHEMICALS AND PROD, NEC	24,315		2,123			22,192	
2941 DYES	2,940		2,940				
2971 NITROGENOUS CHEM FERTILIZERS	17,681			8,378		9,303	
2972 POTASSIUM CHEM FERTILIZERS	41,335			41,335			
2979 FERTILIZER AND MATERIALS, NEC	29,719	16,830		10,889			
2981 GASOLINE	32,800			21,825			10,979
2982 PET FUEL	31,855						31,855
2984 DISTILLATE FUEL OIL	11,910			1,458			10,452
2985 RESIDUAL FUEL OIL	27,173			12,514		14,659	
3241 PORTLAND CEMENT	227,003			125,835		102,068	
3711 MOTOR VEHICLES, PARTS, EQUIP	12	12					
4102 COMMODITIES, NEC	9	9					

## ST. CLAIR RIVER, MICH.

SECTION INCLUDED: ENTIRE LENGTH OF ST. CLAIR RIVER AND BLACK RIVER UP TO WASHINGTON AVENUE IN PORT HURON. CONTROLLING DEPTHS: 27 TO 30 FEET IN ST. CLAIR RIVER AT PORT HURON AND 20 FEET IN BLACK RIVER.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TRAFFIC OF PORTS		THROUGH TRAFFIC		TOTAL	
	TONS	PASSENGERS	TONS	PASSENGERS	TONS	PASSENGERS
1977	4,746,025	282,096	77,004,441		82,750,466	282,096
1978	4,845,300	269,779	102,023,236	962	106,868,536	269,741
1979	4,845,648	281,784	107,845,409		112,691,057	281,784
1980	5,318,169	298,752	83,692,180		89,010,353	298,752
1981	4,846,740	272,715	82,377,416		86,824,156	272,715
1982	3,982,476	196,453	50,706,563		54,689,039	196,453
1983	5,022,252	186,296	55,100,993		60,123,245	186,296
1984	6,642,651	298,649	67,708,065		74,350,714	298,649
1985	6,860,528	223,264	63,057,479		69,918,007	223,264
1986	9,721,250	212,863	55,628,279		65,349,529	212,863

## FREIGHT TRAFFIC, 1986

UPBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS		
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE
TOTAL-----	15,943,838	1,831,056	6,448,030	6,700,503	7,282	24,499	732,868
0103 FIELD CROPS, NEC-----	40	40					
0105 COFFEE-----	112	112					
0201 FRESH AND FROZEN VEGETABLES-----	27	27					
0501 FOREST PRODUCTS, NEC-----	12	12					
0901 FRESH FISH, EXCEPT SHELLFISH-----	5	5					
1001 IRON ORE AND CONCENTRATES-----	1,595,344	287,236	1,308,108				
1051 ALUMINUM ORES, CONCENTRATES-----	65,474	65,474					
1061 MANGANESE ORES, CONCENTRATES-----	9,467	9,467					

## DETROIT, MI, DISTRICT

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ST. CLAIR RIVER, MICH.--CONTINUED

FREIGHT TRAFFIC, 1945--CONTINUED

DOWNBOUND--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS		
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE
1121 COAL AND LIGNITE	11,050,694		4,177,264	6,162,440			710,990
1311 CRUDE PETROLEUM	7,473		7,473				
1411 LIMESTONE	77,064		46,329	22,000			10,735
1442 SAND, GRAVEL, CRUSHED ROCK	10,747						10,743
1451 GRAY	163						
1479 NONMETALLIC MINERALS, NEC	741,455	34,504	329,986	411,670		15,251	
2015 ANIMAL BY-PRODUCTS, NEC	29						
2021 DAIRY PRODUCTS, NEC	69						
2031 FISH AND SHELLFISH, PREPARED	11						
2034 VEGETABLES AND PREP, NEC	170						
2039 PREP FRUIT AND VEG TRICES, NEC	452						
2042 ANIMAL FEEDSTUFFS, NEC	36						
2049 GRAIN, MILL PRODUCTS, NEC	65						
2091 ALCOHOLS	1,847	1,609	144			54	
2091 VEGETABLE OILS, KAYO, SHORT	1,519	1,519					
2095 ICE	223						
2099 MISCELLANEOUS FOOD PRODUCTS	478					18	
2111 TOBACCO AND TOBACCO PRODUCTS	26						
2211 BASIC TEXTILE PRODUCTS	13,079	13,079	1				
2311 APPAREL	51						
2421 LUMBER	1,836		1,806				
2431 VEGET, POTATO, AGRICULT PROD	16						
2491 WOOD MANUFACTURES, NEC	54						
2511 FURNITURE AND FIXTURES	204						
2611 PAPER	100,633	95,641				6,952	
2631 PAPER AND PAPER PRODUCTS, NEC	786		122				
2711 PRINTED MATTER	17						
2811 CRUDE TARB, OIL, GAS PRODUCTS	52,957		52,914				
2813 ALCOHOLS	23,369	41	23,308			20	
2817 BENZENE AND TOLUENE	75,594		46,814	28,780			
2819 BASIC CHEMICALS AND PROD, NEC	43,054	13,560	29,411			63	
2821 PLASTIC MATERIALS	574						
2831 DRUGS	124						
2841 SOAP	96						
2851 PAINTS	162						
2851 GUM AND GUMM CHEMICALS	87						
2871 NITROGENOUS CHEM FERTILIZERS	60,133	51,755	8,378				
2872 POTASSIC CHEM FERTILIZERS	32,212		32,212				
2876 INSECTICIDES, DISINFECTANTS	40						
2879 FERTILIZER AND MATERIALS, NEC	18,830	18,830					
2891 MISCELLANEOUS CHEMICAL PROD	175						
2911 GASOLINE AND CHEMICAL PROD	33,291		33,267			29	
2912 JET FUEL	15,294		6,621	8,673			
2914 DISTILLATE FUEL OIL	57,575						
2915 RESIDUAL FUEL OIL	65,771		30,284	26,299		9,188	
2916 LUBRICATING OILS AND GREASES	48,020						
2917 NAPHTHA, PETROLEUM SOLVENTS	26,929		26,929				
2918 ASPHALT, TAR, AND BITUMS	29,935		29,935				
2991 PETROLEUM AND COAL PROD, NEC	21						
3011 RUBBER AND ALSO PLASTIC PROD	926						
3111 LEATHER AND LEATHER PRODUCTS	233						
3211 GLASS AND GLASS PRODUCTS	431						
3241 BUILDING CEMENT	313,580		313,520				
3251 STRUCTURAL CLAY PRODUCTS	2,083						
3281 CUT STONE AND STONE PRODUCTS	579						
3291 MISCO NONMETALLIC MINERAL PROD	158						
3311 PIT LIMESTONE	18,106		18,106				
3312 SLAG	40,637			40,637			
3314 IRON AND STEEL PRIMARY FORMS	99,691		99,629	62			
3315 IRON, STEEL SHAPES, EXC SHEET	1,026,686	1,021,567	5,042			17	60
3316 IRON AND STEEL PLATES, SHEETS	15,681						
3317 IRON AND STEEL PIPE AND TUBE	20,013						
3318 FERRALLOYS	18,154	12,588	5,566				
3319 IRON AND STEEL PRODUCTS, NEC	2,401	2,380	21				
3321 NONFERROUS METALS, NEC	456						
3322 COPPER ALLOYS, MANUFACT	90						
3323 LEAD AND ZINC MANUFACT	14,777	16,777					
3324 ALUMINUM AND ALLOYS, MANUFACT	10,267	5,184	7,081				
3411 FABRICATED METAL PRODUCTS	12,384						
3511 MACHINERY, EXCEPT ELECTRICAL	17,311	17,293	7			11	
3511 ELECTRICAL MACH AND EQUIP	1,771	1,761				10	
3711 MOTOR VEHICLES, PARTS, EQUIP	860					10	
3731 SHIPS AND BOATS	59						
3791 MISC TRANSPORTATION EQUIPMENT	267						
3811 INSTR, TIME, PHOTO, JET GOODS	36						
3911 MISC MANUFACTURED PRODUCTS	402						
4012 NONFERROUS METAL SCRAP	2,503		1,656				
4112 COMMUNITIES, NEC	258		19				

DOWNBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS			
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE	OTHER
TOTAL	49,405,691	4,008,605	7,459,534	28,984,551	34	36,402	8,918,576	1,989
0102 BARLEY AND RYE	384,072	239,958	144,114					

ST. CLAIR RIVER, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

DOWNBOUND--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS			
		FOREIGN		DOMESTIC LAKEWISE	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN		OVERSEAS	CANADIAN	LAKEWISE	OTHER
0103 CORN	152,412	74,638	75,274					
0104 OATS	8,618		5,618					
0107 MEAT	2,698,593	1,960,765	175,914	757,414				
0111 SOYBEANS	224,873	196,831	28,042					
0119 WILSEEDS, NEC	271,077	271,077						
0129 FIELD CROPS, NEC	11,087	11,087						
0131 FRESH FRUITS	125					125		
0141 FRESH AND FROZEN VEGETABLES	27,130	27,056				74		
1011 IRON ORE AND CONCENTRATES	21,992,256	21,067	2,873,344	19,097,847				
1051 ALUMINUM DRES, CONCENTRATES	15	15						
1071 NONFERROUS DRES, CONCENT, NEC	83,955	83,955						
1121 COAL AND LIGNITE	8,115,212		40,096			4,075,116		
1311 CRUDE PETROLEUM	11,206		11,206					
1411 LIVESTOCK	9,588,189		1,703,193	7,041,557		435,410		1,989
1442 SAW, GRAVEL, CRUSHED ROCK	608,292	50,635	448,801	108,556		300		
1451 CLAY	161,027	52,617	107,720			690		
1492 SULPHUR, DRY	260					260		
1494 GYPSUM, CRUDE AND PLASTERS	650,074		650,026			48		
1499 NONMETALLIC MINERALS, NEC	168,682	4,411	164,271					
2011 MEAT, FRESH, CHILLED, FROZEN	22	22						
2012 MEAT AND PRODUCTS, NEC	39	20			19			
2014 TALLOW, ANIMAL FATS AND OILS	13,407	13,361				86		
2015 ANIMAL BY-PRODUCTS, NEC	53	53						
2021 DAIRY PRODUCTS, NEC	726	726						
2022 DRIED MILK AND CREAM	40,698	40,698						
2034 VEGETABLES AND PREP, NEC	20	20						
2041 WHEAT FLOUR AND SEMOLINA	35,041	35,041						
2042 ANIMAL FEEDS	491	491						
2049 GRAIN MILL PRODUCTS, NEC	129,899	129,899						
2081 ALCOHOLIC BEVERAGES	17	17						
2091 VEGETABLE OILS, MARG, SHORT	18,651	18,651						
2099 MISCELLANEOUS FOOD PRODUCTS	36,853	36,853						
2211 BASIC TEXTILE PRODUCTS	1	1						
2311 APPAREL	1,004	1,004						
2411 LOGS	450	450						
2413 FUEL WOOD, CHARCOAL, WASTES	20	20						
2421 LUMBER	2,090		1,474			616		
2431 VENEER, PLYWOOD, MANUFD WOOD	116					116		
2491 WOOD MANUFACTURES, NEC	48					48		
2611 PULP	609	544				65		
2621 STANDARD NEWSPRINT PAPER	7,014		7,014					
2631 PAPER AND PAPERBOARD	588	272				316		
2691 PULP AND PAPER PRODUCTS, NEC	1	1						
2711 PRINTED MATTER	47	47						
2813 ALCOHOLS	934	934						
2819 BASIC CHEMICALS AND PROD, NEC	44,478	3,665	7,383			33,430		
2821 PLASTIC MATERIALS	119	119						
2822 SYNTHETIC RUBBER	5	5						
2831 DRUGS	22	22						
2841 SOAP	2,973	2,973						
2851 PAINTS	22	22						
2861 GUM AND WOOD CHEMICALS	17	17						
2871 NITROGENOUS CHEM FERTILIZERS	18,478		18,478					
2872 POTASSIC CHEM FERTILIZERS	781,404		781,404					
2873 PHOSPHATIC CHEM FERTILIZERS	88	88						
2876 INSECTICIDES, DISINFECTANTS	61	61						
2891 MISCELLANEOUS CHEMICAL PROD	454	454						
2911 GASOLINE	73,577		66,580	6,997				
2914 DISTILLATE FUEL OIL	50,120		50,120					
2915 RESIDUAL FUEL OIL	177,171		131,070	38,101		8,050		
2916 LUBRICATING OILS AND GREASES	1	1						
2917 NAPHTHA, PETROLEUM SOLVENTS	4,790	26	4,764					
2918 ASPHALT, TAR, AND BITUMENS	100,455		5,354	95,101				
2920 COKE, PETROLEUM COKE	981,750	336,320	608,096	39,334				
3011 RUBBER AND MISC PLASTIC PROD	48	32			15			
3111 LEATHER AND LEATHER PRODUCTS	19		19					
3241 BUILDING CEMENT	1,047,655		7,121	1,040,534				
3251 STRUCTURAL CLAY PRODUCTS	1		1					
3291 MISC NONMETALLIC MINERAL PROD	40	40						
3312 SLAG	68,148		68,148					
3314 IRON AND STEEL PRIMARY FORMS	15,566	15,566						
3315 IRON, STEEL SHAPES, EXC SHEET	2,764	1,232	1,537					
3316 IRON AND STEEL PLATES, SHEETS	8,591	8,591						
3319 IRON AND STEEL PRODUCTS, NEC	2,177		2,177					
3321 NONFERROUS METALS, NEC	119		119					
3411 FABRICATED METAL PRODUCTS	1,101	256	840			39		
3511 MACHINERY, EXCEPT ELECTRICAL	8,058	8,041	11			6		
3611 ELECTRICAL MACH AND EQUIP	547	544	3					
3711 MOTOR VEHICLES, PARTS, EQUIP	209	150	6			53		
3731 SHIPS AND BOATS	233	233						
3791 MISC TRANSPORTATION EQUIPMENT	19	19						
3811 INST, TIME, PHOTO, OPT GOODS	4	4						
3911 MISC MANUFACTURED PRODUCTS	6	6						
4011 IRON AND STEEL SCRAP	372,464	354,323	18,141					
4012 NONFERROUS METAL SCRAP	76					76		
4024 PAPER WASTE AND SCRAP	47					47		
4112 COMMODITIES, NEC	966	951	8			7		
9999 DEPARTMENT OF DEFENSE AND SCI	107	107						

TONS, ALL TRAFFIC, 65,349,529.  
 TON-MILES, ALL TRAFFIC, 2,166,480,763.

# DETROIT, MI, DISTRICT

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PORT HURON, MICH. (INCLUDED IN ST. CLAIR RIVER)

SECTION INCLUDED: WEST BANK OF THE ST. CLAIR RIVER FROM MOUTH OF RIVER TO GRAND TRUNK WESTERN RAILROAD BRIDGE AND BOTH BANKS OF THE BLACK RIVER UP TO WASHINGTON AVENUE IN PORT HURON, MICHIGAN. CONTROLLING DEPTHS: FROM LAKE ST. CLAIR TO STAG ISLAND, 27.1 FEET. IN THE STAG ISLAND TO PORT HURON CHANNEL AND THE FOOT OF LAKE HURON CHANNEL, 27.3 FEET AND 30 FEET RESPECTIVELY. IN THE BLACK RIVER, 17 FEET, FOR A WIDTH OF 70 FEET, FROM THE MOUTH TO 1,700 FEET UPSTREAM OF THE GRAND TRUNK WESTERN RAILROAD BRIDGE, AND 15 FEET FOR A WIDTH OF 50 FEET THROUGH THE SETTLING BASIN TO WASHINGTON AVENUE. PROJECT DEPTHS: IN THE ST. CLAIR RIVER, SLOPES FROM 30 FEET AT MOUTH TO 27.5 FEET AT GRAND TRUNK WESTERN RAILROAD BRIDGE. IN THE BLACK RIVER, 20 FEET FROM THE MOUTH TO THE UPPER END OF THE SETTLING BASIN, ABOUT 2,300 FEET UPSTREAM FROM THE GRAND TRUNK WESTERN RAILROAD BRIDGE.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	325,690	4,600	1982-----	320,993	-----
1978-----	607,097	-----	1983-----	351,463	-----
1979-----	894,465	-----	1984-----	578,704	-----
1980-----	695,640	-----	1985-----	724,843	-----
1981-----	628,426	-----	1986-----	519,010	-----

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC
		OVERSEAS		CANADIAN		LAKEWISE
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS
TOTAL-----	519,010	7,282	34	60	36,402	475,232
0131 FRESH FRUITS-----	125	-----	-----	-----	125	-----
0141 FRESH AND FROZEN VEGETABLES-----	74	-----	-----	-----	74	-----
1411 LIMESTONE-----	464,489	-----	-----	-----	-----	464,489
1402 SAND, GRAVEL, CRUSHED ROCK-----	11,093	-----	-----	-----	300	10,793
1451 CLAY-----	690	-----	-----	-----	690	-----
1492 SULPHUR, DRY-----	260	-----	-----	-----	260	-----
1494 GYPSUM, CRUDE AND PLASTERS-----	48	-----	-----	-----	48	-----
2012 MEAT AND PRODUCTS, NEC-----	19	-----	19	-----	-----	-----
2014 TALLOW, ANIMAL FATS AND OILS-----	86	-----	-----	-----	86	-----
2081 ALCOHOLIC BEVERAGES-----	54	54	-----	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	18	18	-----	-----	-----	-----
2421 LUMBER-----	616	-----	-----	-----	616	-----
2431 VENEER, PLYWOOD, WORKED WOOD-----	116	-----	-----	-----	116	-----
2491 WOOD MANUFACTURES, NEC-----	48	-----	-----	-----	48	-----
2611 PULP-----	7,017	6,952	-----	-----	65	-----
2631 PAPER AND PAPERBOARD-----	316	-----	-----	-----	316	-----
2711 PRINTED MATTER-----	62	62	-----	-----	-----	-----
2813 ALCOHOLS-----	20	20	-----	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	33,513	83	-----	-----	33,430	-----
2911 GASOLINE-----	29	29	-----	-----	-----	-----
3011 RUBBER AND MISC PLASTIC PROD-----	15	-----	15	-----	-----	-----
3315 IRON, STEEL SHAPES, EXC SHEET-----	77	17	-----	60	-----	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	2	-----	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS-----	48	9	-----	-----	39	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	17	11	-----	-----	6	-----
3611 ELECTRICAL MACH AND EQUIP-----	10	10	-----	-----	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	63	10	-----	-----	53	-----
3911 MISC MANUFACTURED PRODUCTS-----	5	5	-----	-----	-----	-----
4012 NONFERROUS METAL SCRAP-----	76	-----	-----	-----	76	-----
4024 PAPER WASTE AND SCRAP-----	47	-----	-----	-----	47	-----
4112 COMMODITIES, NEC-----	7	-----	-----	-----	7	-----

ST. CLAIR, MICH. (INCLUDED IN ST. CLAIR RIVER)

SECTION INCLUDED: WEST BANK OF ST. CLAIR RIVER AT ST. CLAIR, MICH. CONTROLLING DEPTH: 27.3 FEET. PROJECT DEPTH: 27.3 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	4,586,145	1982-----	3,258,562
1978-----	3,319,786	1983-----	4,241,500
1979-----	3,286,404	1984-----	5,379,966
1980-----	3,726,267	1985-----	6,176,971
1981-----	3,350,691	1986-----	8,608,164

## FREIGHT TRAFFIC, 1986

DOMESTIC

(SHORT TONS)

COMMODITY	LAKEWISE
	RECEIPTS
1121 COAL AND LIGNITE-----	8,608,164

# Waterborne Commerce of the United States, 1986

MARINE CITY, MICH. (INCLUDED IS ST. CLAIR RIVER)

SECTION INCLUDED: WEST BANK OF ST. CLAIR RIVER AT MARINE CITY, MICH., 21.5 MILES UPBOUND TO LAKE HURON; 19.2 MILES DOWNBOUND TO LAKE ST. CLAIR, MICH. CONTROLLING DEPTH: 27 FEET. PROJECT DEPTH: AT LOW WATER DATUM: 27.5 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	250,936	224,794	1982-----	109,841	138,377
1978-----	324,653	193,894	1983-----	163,076	114,801
1979-----	239,299	189,620	1984-----	350,494	111,755
1980-----	281,682	215,914	1985-----	276,747	147,843
1981-----	190,026	177,771	1986-----	381,656	129,254

## FREIGHT TRAFFIC, 1986

## DOMESTIC

(SHORT TONS)

COMMODITY	LAKEWISE RECEIPTS
1411 LIMESTONE-----	341,656

## CHANNELS IN LAKE ST. CLAIR

SECTION INCLUDED: IMPROVED SHIP CHANNELS CONNECTING ST. CLAIR RIVER AND DETROIT RIVER ACROSS LAKE ST. CLAIR, ENTRANCE CHANNELS TO MOUTH OF CLINTON RIVER AND THE CANADIAN CHANNEL TO THE MOUTH OF THE THAMES RIVER. CONTROLLING DEPTHS: 27.0 FEET IN THE MAIN CHANNEL WITH 2 FEET TO 3 FEET MISC. SHOULDER ALONG CHANNEL LIMITS 4 FEET IN CHANNEL TO CLINTON RIVER. PROJECT DEPTHS: 27.5 FEET IN MAIN CHANNEL AND 8 FEET IN CLINTON RIVER CHANNEL.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	77,647,245	4,622	1982-----	50,221,716	-----
1978-----	102,197,442	962	1983-----	54,708,477	-----
1979-----	107,708,762	-----	1984-----	67,819,040	-----
1980-----	83,914,264	-----	1985-----	52,880,900	-----
1981-----	82,294,163	-----	1986-----	55,829,259	-----

## FREIGHT TRAFFIC, 1986

## UPBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC		
		FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE
TOTAL-----	15,657,162	1,938,339	6,585,953	7,132,971
0129 FIELD CROPS, NEC-----	40	40	-----	-----
0133 COFFEE-----	112	112	-----	-----
0141 FRESH AND FROZEN VEGETABLES-----	27	27	-----	-----
0661 FOREST PRODUCTS, NEC-----	12	12	-----	-----
0911 FRESH FISH, EXCEPT SHELLFISH-----	5	5	-----	-----
1011 IRON ORE AND CONCENTRATES-----	1,595,344	287,236	1,308,108	-----
1051 ALUMINUM ORES, CONCENTRATES-----	68,474	68,474	-----	-----
1061 MANGANESE ORES, CONCENTRATES-----	9,467	9,467	-----	-----
1121 COAL AND LIGNITE-----	11,050,694	-----	4,177,264	6,873,430
1411 LIMESTONE-----	79,064	-----	46,329	32,735
1442 SAND, GRAVEL, CRUSHED ROCK-----	10,747	-----	4	17,743
1451 CLAY-----	163	163	-----	-----
1499 NONMETALLIC MINERALS, NEC-----	791,455	34,544	345,237	411,674
2015 ANIMAL BY-PRODUCTS, NEC-----	29	-----	29	-----
2021 DAIRY PRODUCTS, NEC-----	69	-----	69	-----
2031 FISH AND SHELLFISH, PREPARED-----	11	-----	11	-----
2034 VEGETABLES AND PREP, NEC-----	170	-----	170	-----
2039 PREP FRUIT AND VEG JUICE, NEC-----	452	-----	452	-----
2042 ANIMAL FEEDS-----	36	-----	36	-----
2049 GRAIN MILL PRODUCTS, NEC-----	65	-----	65	-----
2091 ALCOHOLIC BEVERAGES-----	1,647	1,703	144	-----
2091 VEGETABLE OILS, MARG, SHORT-----	1,319	1,319	-----	-----
2095 ICE-----	223	-----	223	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	478	-----	478	-----
2111 TOBACCO MANUFACTURES-----	26	-----	26	-----
2211 BASIC TEXTILE PRODUCTS-----	13,079	13,074	1	-----
2311 APPAREL-----	51	-----	51	-----
2421 LUMBER-----	1,856	-----	50	1,806
2431 VENEER, PLYWOOD, WORKED WOOD-----	16	-----	16	-----
2491 WOOD MANUFACTURES, NEC-----	54	-----	53	1
2511 FURNITURE AND FIXTURES-----	198	-----	198	-----
2611 PULP-----	100,633	100,633	-----	-----
2631 PAPER AND PAPERBOARD-----	766	-----	644	122
2691 PULP AND PAPER PRODUCTS, NEC-----	17	-----	15	1
2711 PRINTED MATTER-----	47	-----	47	-----
2811 CRUDE TAR, OIL, GAS PRODUCTS-----	1,098	-----	43	1,055
2813 ALCOHOLS-----	61	-----	61	-----
2817 BENZENE AND TOLUENE-----	43,339	-----	14,559	28,780
2819 BASIC CHEMICALS AND PROD, NEC-----	17,527	13,643	3,884	-----
2821 PLASTIC MATERIALS-----	574	-----	574	-----
2831 DRUGS-----	124	-----	124	-----

## DETROIT, MI, DISTRICT

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CHANNELS IN LAKE ST. CLAIR--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

UPBOUND--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC		
		FOREIGN	CANADIAN	DOMESTIC
		OVERSEAS		LAKEWISE
3401 SOAP-----	96	96		
3501 PAINTS-----	362	362		
3601 ORG AND AGRO CHEMICALS-----	87	87		
3671 NITROGENOUS CHEM FERTILIZERS-----	60,133	51,755	8,378	
3672 PHOSPHORIC CHEM FERTILIZERS-----	32,212		32,212	
3676 INSECTICIDES, DISINFECTANTS-----	40	40		
3679 FERTILIZER AND MATERIALS, NEC-----	18,830	18,830		
3691 MISCELLANEOUS CHEMICAL PROD-----	175	167	8	
2911 GASOLINE-----	7,046	29	7,017	
2912 JET FUEL-----	15,294		6,621	8,673
2914 DISTILLATE FUEL OIL-----	29,724		29,724	
2915 RESIDUAL FUEL OIL-----	30,483		4,184	26,299
2916 LUBRICATING OILS AND GREASES-----	48,020		48,020	
2991 PETROLEUM AND COAL PROD, NEC-----	21	21		
3011 RUBBER AND MISC PLASTIC PROD-----	926	926		
3111 LEATHER AND LEATHER PRODUCTS-----	233	233		
3211 GLASS AND GLASS PRODUCTS-----	431	431		
3241 BUILDING CEMENT-----	313,580	60	313,520	
3251 STRUCTURAL CLAY PRODUCTS-----	2,083	2,083		
3281 CUT STONE AND STONE PRODUCTS-----	579	579		
3291 MISC NONMETALLIC MINERAL PROD-----	158	158		
3311 PIG IRON-----	18,106		18,106	
3312 SLAGS-----	40,637			40,637
3314 IRON AND STEEL PRIMARY FORMS-----	99,629	99,629	62	
3315 IRON, STEEL SHAPES, EXC SHEET-----	1,026,688	1,021,580	5,102	
3316 IRON AND STEEL PLATES, SHEETS-----	15,681	15,681		
3317 IRON AND STEEL PIPE AND TUBE-----	20,013	20,013		
3318 FERMALLUOYS-----	18,154	12,588	5,566	
3319 IRON AND STEEL PRODUCTS, NEC-----	2,401	2,380	21	
3321 NONFERROUS METALS, NEC-----	456	456		
3322 COPPER ALLOYS, UNWORKED-----	90	90		
3323 LEAD AND ZINC, UNWORKED-----	18,777	18,777		
3324 ALUMINUM AND ALLOYS, UNWORKED-----	10,267	3,166	7,081	
3411 FABRICATED METAL PRODUCTS-----	12,384	12,382	2	
3511 MACHINERY, EXCEPT ELECTRICAL-----	17,311	17,304	7	
3611 ELECTRICAL MACH AND EQUIP-----	1,771	1,771		
3711 MOTOR VEHICLES, PARTS, EQUIP-----	880	878	2	
3731 SHIPS AND BOATS-----	59	59		
3791 MISC TRANSPORTATION EQUIPMENT-----	267	267		
3811 INSTR, TIME, PHOTO, OPT GOODS-----	36	36		
3911 MISC MANUFACTURED PRODUCTS-----	402	401	1	
4012 NONFERROUS METAL SCRAP-----	2,503	847	1,656	
4112 COMMODITIES, NEC-----	288	269	19	

DOWNBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC		
		FOREIGN	CANADIAN	DOMESTIC
		OVERSEAS		LAKEWISE
TOTAL-----	39,972,107	4,004,639	6,982,917	28,984,551
0102 HAYLEY AND WYE-----	384,072	239,958	144,114	
0103 CORN-----	152,912	74,638	78,274	
0104 OATS-----	8,818		8,818	
0107 WHEAT-----	2,894,593	1,460,265	176,914	757,414
0111 SOYBEANS-----	224,873	196,831	28,042	
0114 OILSEEDS, NEC-----	271,077	271,077		
0129 FIELD CROPS, NEC-----	11,087	11,087		
0141 FRESH AND FROZEN VEGETABLES-----	27,056	27,056		
1011 IRON ORE AND CONCENTRATES-----	21,992,258	21,067	2,873,344	19,097,847
1051 ALUMINUM ORES, CONCENTRATES-----	15	15		
1091 NONFERROUS ORES, CONCENT, NEC-----	83,955	83,955		
1121 COAL AND LIGNITE-----	40,096			40,096
1311 CRUDE PETROLEUM-----	11,206		11,206	
1411 LIMESTONE-----	8,289,130		1,247,573	7,041,557
1442 SAND, GRAVEL, CRUSHED ROCK-----	561,337	50,635	402,146	108,556
1451 CLAY-----	160,337	52,617	107,720	
1494 GYPSUM, CRUDE AND PLASTERS-----	650,026			650,026
1499 NONMETALLIC MINERALS, NEC-----	168,682	4,411	164,271	
2011 MEAT, FRESH, CHILLED, FROZEN-----	22	22		
2012 MEAT AND PRODUCTS, NEC-----	39	39		
2014 TALLOW, ANIMAL FATS AND OILS-----	13,361	13,361		
2015 ANIMAL BY-PRODUCTS, NEC-----	53	53		
2021 DAIRY PRODUCTS, NEC-----	726	726		
2022 DRIED MILK AND CREAM-----	40,698	40,698		
2034 VEGETABLES AND PREP, NEC-----	20	20		
2041 WHEAT FLOUR AND SEMOLINA-----	35,041	35,041		
2042 ANIMAL FEEDS-----	491	491		
2049 GRAIN MILL PRODUCTS, NEC-----	129,899	129,899		
2081 ALCOHOLIC BEVERAGES-----	17	17		
2091 VEGETABLE OILS, MARK, SHORT-----	18,651	18,651		
2099 MISCELLANEOUS FOOD PRODUCTS-----	36,853	36,853		
2211 BASIC TEXTILE PRODUCTS-----	1	1		
2311 APPAREL-----	1,004	1,004		
2411 LOGS-----	450	450		
2413 FUEL WOOD, CHARCOAL, WASTES-----	20	20		
2421 LUMBER-----	1,474		1,474	
2611 PULP-----	544	544		

## Waterborne Commerce of the United States, 1986

CHANNELS IN LAKE ST. CLAIR--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

UPBOUND--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC		
		FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE
2621 STANDARD NEWSPRINT PAPER	7,014		7,014	
2631 PAPER AND PAPERBOARD	272	272		
2691 PULP AND PAPER PRODUCTS, NEC	1	1		
2711 PRINTED MATTER PRODUCTS, NEC	47	47		
2813 ALCOHOLS	934	934		
2819 BASIC CHEMICALS AND PROD, NEC	42,706	3,665	39,041	
2821 PLASTIC MATERIALS	119	119		
2822 SYNTHETIC RUBBER	5	5		
2831 DRUGS	22	22		
2841 SOAP	2,973	2,973		
2851 PAINTS	22	22		
2861 GUM AND GUM CHEMICALS	17	17		
2871 NITROGENOUS CHEM FERTILIZERS	16,478		16,478	
2872 POTASSIUM CHEM FERTILIZERS	781,404		781,404	
2873 PHOSPHATIC CHEM FERTILIZERS	88	88		
2876 INSECTICIDES, DISINFECTANTS	61	61		
2891 MISCELLANEOUS CHEMICAL PROD	454	454		
2911 GASOLINE	73,577		66,580	6,997
2914 DISTILLATE FUEL OIL	50,120		50,120	
2915 RESIDUAL FUEL OIL	169,121		131,020	38,101
2916 LUBRICATING OILS AND GREASES	1	1		
2917 NAPHTHA, PETROLEUM SOLVENTS	4,790	26	4,764	
2918 ASPHALT, TAR, AND BITUMENS	100,455		5,354	95,101
2920 COKE, PETROLEUM COKE	981,750	334,320	608,090	39,334
3111 RUBBER AND MISC PLASTIC PROD	48	47	1	
3111 LEATHER AND LEATHER PRODUCTS	19		19	
3241 BUILDING CEMENT	1,047,655		7,121	1,040,534
3251 STRUCTURAL CLAY PRODUCTS	1	1		
3291 MISC NONMETALLIC MINERAL PROD	40	40		
3312 SLATS	68,148			68,148
3314 IRON AND STEEL PRIMARY FORMS	15,566	15,566		
3315 IRON, STEEL SHAPES, EXC SHEET	2,769	1,232	1,537	
3316 IRON AND STEEL PLATES, SHEETS	8,591	8,591		
3319 IRON AND STEEL PRODUCTS, NEC	2,177		2,177	
3321 NONFERROUS METALS, NEC	119		119	
3411 FABRICATED METAL PRODUCTS	1,102	256	6	840
3511 MACHINERY, EXCEPT ELECTRICAL	8,052	8,041	11	
3611 ELECTRICAL MACH AND EQUIP	547	544	3	
3711 MOTOR VEHICLES, PARTS, EQUIP	156	150	6	
3731 SHIPS AND BOATS	233	233		
3791 MISC TRANSPORTATION EQUIPMENT	19	19		
3811 INSTR, TIME, PHOTO, OPT GOODS	4	4		
3911 MISC MANUFACTURED PRODUCTS	6	6		
4011 IRON AND STEEL SCRAP	372,464	354,323	18,141	
4112 COMMODITIES, NEC	959	951	8	
9999 DEPARTMENT OF DEFENSE AND SCI	107	107		
TONS, ALL TRAFFIC	55,629,269			
TNM-MILES, ALL TRAFFIC	1,901,326,842			

DETROIT RIVER, MICH.

SECTION INCLUDES ENTIRE LENGTH OF DETROIT RIVER AND ROUGE RIVER TO HEAD OF PROJECT. CONTROLLING DEPTHS: 25 TO 28.5 FEET AND 21 TO 25 FEET, RESPECTIVELY WITH 5 TO 7 FEET OF SHOALING ALONG THE CHANNEL LIMITS OF THE LOWER LIVINGSTONE AND EAST OUTER CHANNEL, AND WITH 2 TO 3 FEET OF SHOALING ALONG THE CENTER LINE THROUGHOUT THE CHANNELS, WITH PROJECT DEPTH IN THE REGULARLY TRAVELED SHIPPING LANES.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TRAFFIC OF PORTS		THROUGH TRAFFIC		TOTAL	
	TONS	PASSENGERS	TONS	PASSENGERS	TONS	PASSENGERS
1977	25,106,301	896,072	65,470,682	22	90,576,983	896,094
1978	25,881,508	867,828	87,150,328		113,031,836	867,828
1979	24,995,987	831,860	93,396,042		118,392,029	831,860
1980	19,278,914	484,708	72,793,919		92,072,833	484,708
1981	17,839,139	356,694	72,566,737		90,405,876	356,694
1982	13,176,099	369,388	43,190,094		56,366,193	369,388
1983	14,955,003	879,146	45,805,095		60,760,098	879,146
1984	17,530,626	1,617,966	57,521,443		75,052,569	1,617,966
1985	15,609,067	1,219,480	53,795,219		69,404,286	1,219,480
1986	15,139,865	977,736	46,593,401		61,733,266	977,736

FREIGHT TRAFFIC, 1986

UPBOUND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS		
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE
TOTAL	20,647,710	1,838,338	6,343,345	7,348,895	1,011,550	964,543	3,141,039
1129 FIELD CROPS, NEC	97	40			57		
1133 COFFEE	112	112					
1141 FRESH AND FROZEN VEGETABLES	30	27			7		

# DETROIT, MI, DISTRICT

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DETROIT, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

UPBOUND--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS		
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE
3161 ANIMALS AND PRODUCTS	375				317	58	
3191 MISCELLANEOUS FARM PRODUCTS	2				2		
3441 FOODS, FISHES AND ALLIED PRODUCTS	114				83	31	
3661 FERTILIZERS	176	12			142	22	
3911 FIBER, TEXTILE, LEATHER AND FUR	5	5					
3911 FIBER, TEXTILE, LEATHER AND FUR	2,003,020	247,236	1,308,108			370,305	37,373
3951 ALLIUMS, FRUIT, VEGETABLES	64,475	68,474			1		
3961 NONGRANULAR SOLIDS, EXCEPT FERTILIZERS	24,057	9,467			14,590		
3991 MISCELLANEOUS SOLIDS, EXCEPT FERTILIZERS	7	7				7	
4121 CRUDE PETROLEUM	13,861,479		4,193,313	6,875,450			2,794,736
4121 CRUDE PETROLEUM	101,063		21,999	32,735		46,329	
4421 SAND, GRAVEL, CRUSHED ROCK	46,114	4	585	13,743		34,782	
4511 CLAY	245	163			81	1	
4991 NONMETALLIC MINERALS, EXCEPT CLAY	1,250,568	34,544	345,237	411,674	73	344,553	114,087
4991 NONMETALLIC MINERALS, EXCEPT CLAY	167				45	119	
5011 FERTILIZERS	56				10	46	
5011 FERTILIZERS	185		29		20	136	
5021 FERTILIZERS	59	69					
5031 FERTILIZERS	59,492	11			21		59,360
5034 FERTILIZERS	917	170			244	523	
5039 FERTILIZERS	4,197	452			846	2,849	
5042 FERTILIZERS	387	36			351		
5049 FERTILIZERS	362	65			220	77	
5081 ALLIUMS, FRUIT, VEGETABLES	4,333	1,703	144		3,543	2,943	
5091 FERTILIZERS	1,731	1,319			412		
5092 FERTILIZERS	73				73		
5099 FERTILIZERS	223						
5099 FERTILIZERS	2,000	478			1,359	163	
5111 THROUGH TRAFFIC	26	26					
5111 THROUGH TRAFFIC	15,613	13,076	1		265	269	
5111 THROUGH TRAFFIC	110	51			42	17	
5116 THROUGH TRAFFIC	22				22		
5211 LUMBER	2,381	30	1,406		62	483	
5231 LUMBER	182	16			98	66	
5291 LUMBER	130	53	1		51	25	
5311 FURNITURE	2,071	198			1,560	313	
5311 FURNITURE	104,927	100,635			3,294		
5331 FURNITURE	2,757	644	122		1,502	489	
5391 FURNITURE	467	16	1		254	211	
5711 PAINTS	278	87			154	37	
5811 CRUDE RUBBER, RUBBER PRODUCTS	1,628	43	1,055		409	121	
5813 CRUDE RUBBER	2,724	61			507	2,156	
5817 CRUDE RUBBER	43,339		14,559				28,780
5819 CRUDE RUBBER	26,366	13,603	3,884		4,698	4,161	
5921 PLASTIC MATERIALS	2,983	574			1,392	1,017	
5922 PLASTIC MATERIALS	102				100	2	
5923 PLASTIC MATERIALS	18					18	
5931 CRACKED PETROLEUM	783	124			285	374	
5941 CRACKED PETROLEUM	418	96			278	64	
5951 PAINTS	4,313	362			3,636	315	
5961 PAINTS	87	87					
5971 CRACKED PETROLEUM	65,004	51,755	8,378			4,671	
5972 CRACKED PETROLEUM	32,217		32,212				
5976 CRACKED PETROLEUM	821	40			566	215	
5979 CRACKED PETROLEUM	29,538	18,830			10,671	37	
5991 CRACKED PETROLEUM	4,462	187	8		2,265	2,022	
5991 CRACKED PETROLEUM	16,967	29	7,017			9,943	
5992 CRACKED PETROLEUM	15,294			8,673		6,621	
5994 CRACKED PETROLEUM	32,082		20,153			11,929	
5995 CRACKED PETROLEUM	63,176		4,184	11,640	5,606	27,107	14,659
5996 CRACKED PETROLEUM	44,846		29,400		7	14,437	
5997 CRACKED PETROLEUM	23				23		
5999 CRACKED PETROLEUM	32	21			11	20	
6011 RUBBER AND MISCELLANEOUS PRODUCTS	4,074	926			2,647	501	
6111 LEATHER AND LEATHER PRODUCTS	406	232	1		128	45	
6211 GLASS AND GLASS PRODUCTS	1,496	430	1		521	544	
6291 GLASS AND GLASS PRODUCTS	336,851	60	313,520		19,978	8	3,285
6291 GLASS AND GLASS PRODUCTS	6,597	2,083			2,505	2,009	
6291 GLASS AND GLASS PRODUCTS	2,702	579			1,138	955	
6291 GLASS AND GLASS PRODUCTS	843	158			474	211	
6311 PETROLEUM	14,106		18,106				
6312 PETROLEUM	124,454					20,095	108,359
6314 IRON AND STEEL PRIMARY FORMS	201,464	99,629	62		101,773		
6315 IRON, STEEL SHAPES, END SHEETS	1,814,549	1,021,584	5,102		766,537	21,326	
6316 IRON AND STEEL PLATING SHEETS	15,669	15,681			8		
6317 IRON AND STEEL PIPE AND TUBES	27,845	20,013			7,820	12	
6319 IRON AND STEEL PRODUCTS, MISCELLANEOUS	26,009	12,588	5,566		6,957	898	
6319 IRON AND STEEL PRODUCTS, MISCELLANEOUS	6,170	2,380	21		1,401	1,868	
6321 ALUMINUM METALS, EXCEPT PRIMARY	2,446	456			758	1,232	
6322 COPPER ALLOYS, EXCEPT PRIMARY	999	90			656	253	
6323 LEAD AND ZINC ALLOYS, EXCEPT PRIMARY	21,400	18,777			2,273	350	
6324 ALUMINUM AND ZINC ALLOYS, UNREFINED	14,138	5,186	7,081		3,126	745	
6411 FABRICATED METAL PRODUCTS	21,088	12,382	2		3,936	4,769	
6511 MACHINERY, EXCEPT ELECTRICAL	42,929	17,304	7		20,895	4,723	
6611 ELECTRICAL MACHINERY AND EQUIPMENT	3,918	1,771			1,502	645	
6711 MOTOR VEHICLES, PARTS, EQUIPMENT	11,449	878	2		5,819	7,520	
6731 SHIPS AND BOATS	151	59			84	8	
6791 MISCELLANEOUS TRANSPORT EQUIPMENT	417	267			148	2	
6811 INSTRUMENTS, PHOTOGRAPHIC	676	34	2		322	318	
6911 MISCELLANEOUS MANUFACTURED PRODUCTS	425	401	1		438	85	
6911 MISCELLANEOUS MANUFACTURED PRODUCTS	595				459	136	
6912 MISCELLANEOUS METAL SCRAP	2,568	847	1,656		43	22	
6912 MISCELLANEOUS METAL SCRAP	902	269	19		396	218	

## Waterborne Commerce of the United States, 1986

DETROIT RIVER, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

DUNDOJND

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS			
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE	OTHER
TOTAL-----	41,085,556	4,004,639	6,737,225	20,320,959	791,958	330,035	4,947,291	5,451
1102 BARLEY AND RYE-----	384,072	234,958	144,114	-----	-----	-----	-----	-----
1103 CORN-----	155,103	74,439	76,274	-----	2,120	161	-----	-----
1104 OATS-----	6,818	-----	5,818	-----	-----	-----	-----	-----
1107 WHEAT-----	2,694,593	1,460,265	176,914	757,414	-----	-----	-----	-----
1111 SOYBEANS-----	224,951	196,831	28,042	-----	78	-----	-----	-----
1119 OILSEEDS, NEC-----	271,077	271,077	-----	-----	-----	-----	-----	-----
1129 FIELD CROPS, NEC-----	11,100	11,037	-----	-----	13	-----	-----	-----
1141 FRESH AND FROZEN VEGETABLES-----	30,621	27,056	-----	-----	2,736	729	-----	-----
1161 ANIMALS AND PRODUCTS, NEC-----	16	-----	-----	-----	16	-----	-----	-----
1011 IRON ORE AND CONCENTRATES-----	21,992,256	21,067	2,873,344	14,228,369	-----	-----	4,869,478	-----
1031 ALUMINUM DRES, CONCENTRATES-----	15	15	-----	-----	-----	-----	-----	-----
1091 NONFERROUS DRES, CONCENT, NEC-----	83,955	83,955	-----	-----	-----	-----	-----	-----
1121 COAL AND LIGNITE-----	40,096	-----	-----	40,096	-----	-----	-----	-----
1311 CRUDE PETROLEUM-----	11,206	-----	4,997	-----	-----	2,209	-----	-----
1411 LIMESTONE-----	8,289,130	-----	1,247,573	4,161,701	-----	-----	2,859,856	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	561,337	50,635	402,146	108,556	-----	-----	-----	-----
1451 CLAY-----	160,573	52,617	107,720	-----	108	38	-----	-----
1494 GYPSUM, CRUDE AND PLASTER-----	650,646	-----	349,817	-----	20	-----	300,204	-----
1499 NONMETALLIC MINERALS, NEC-----	168,682	4,311	34,171	-----	-----	130,100	-----	-----
2011 MEAT, FRESH, CHILLED, FROZEN-----	42	22	-----	-----	20	-----	-----	-----
2012 MEAT AND PRODUCTS, NEC-----	39	39	-----	-----	-----	-----	-----	-----
2014 TALLOW, ANIMAL FATS AND OILS-----	33,921	13,361	-----	-----	20,540	-----	-----	-----
2015 ANIMAL BY-PRODUCTS, NEC-----	2,113	53	-----	-----	1,665	345	-----	-----
2021 DAIRY PRODUCTS, NEC-----	726	726	-----	-----	-----	-----	-----	-----
2022 DRIED MILK AND CREAM-----	40,690	40,690	-----	-----	-----	-----	-----	-----
2034 VEGETABLES AND PREP, NEC-----	20	20	-----	-----	-----	-----	-----	-----
2041 WHEAT FLOUR AND SEMOLINA-----	35,041	35,041	-----	-----	-----	-----	-----	-----
2042 ANIMAL FEEDS-----	510	491	-----	-----	19	-----	-----	-----
2049 GRAIN MILL PRODUCTS, NEC-----	130,081	129,899	-----	-----	182	-----	-----	-----
2061 SUGAR-----	2,750	-----	2,750	-----	-----	-----	-----	-----
2091 ALCOHOLIC BEVERAGES-----	75	17	-----	-----	48	10	-----	-----
2091 VEGETABLE OILS, MAYO, SHORT-----	18,651	18,651	-----	-----	-----	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	36,479	36,853	-----	-----	26	-----	-----	-----
2211 BASIC TEXTILE PRODUCTS-----	34	1	-----	-----	31	2	-----	-----
2311 APPAREL-----	1,004	1,004	-----	-----	-----	-----	-----	-----
2411 LOGS-----	1,494	450	-----	-----	1,044	-----	-----	-----
2413 FUEL WOOD, CHARCOAL, WASTES-----	20	20	-----	-----	-----	-----	-----	-----
2421 LUMBER-----	2,230	-----	1,985	-----	222	23	-----	-----
2431 VENEER, PLYWOOD, JOINED WOOD-----	1,967	-----	-----	-----	1,839	128	-----	-----
2611 PULP-----	544	544	-----	-----	-----	-----	-----	-----
2621 STANDARD NEWSPRINT PAPER-----	7,014	-----	7,014	-----	-----	-----	-----	-----
2631 PAPER AND PAPERBOARD-----	543	272	-----	-----	70	201	-----	-----
2691 PULP AND PAPER PRODUCTS, NEC-----	65	1	-----	-----	64	-----	-----	-----
2711 PRINTED MATTER-----	198	47	-----	-----	18	133	-----	-----
2812 DYES, PIGMENT, TANNING MATS-----	10	-----	-----	-----	10	-----	-----	-----
2813 ALCOHOLS-----	935	934	-----	-----	1	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	43,292	3,665	37,041	-----	539	47	-----	-----
2821 PLASTIC MATERIALS-----	1,175	119	-----	-----	1,005	51	-----	-----
2822 SYNTHETIC RUBBER-----	170	5	-----	-----	161	4	-----	-----
2831 DRUGS-----	48	22	-----	-----	26	-----	-----	-----
2841 SOAP-----	3,040	2,973	-----	-----	660	13	-----	-----
2851 PAINTS-----	22	22	-----	-----	-----	-----	-----	-----
2861 GUM AND WOOD CHEMICALS-----	17	17	-----	-----	-----	-----	-----	-----
2871 NITROGENOUS LIQEM FERTILIZERS-----	16,478	-----	16,478	-----	-----	-----	-----	-----
2872 POTASSIC LIQEM FERTILIZERS-----	781,404	-----	782,394	-----	-----	39,010	-----	-----
2873 PHOSPHATIC LIQEM FERTILIZERS-----	86	88	-----	-----	-----	-----	-----	-----
2876 INSECTICIDES, DISINFECTANTS-----	439	61	-----	-----	268	110	-----	-----
2879 FERTILIZER AND MATERIALS, NEC-----	22	-----	-----	-----	22	-----	-----	-----
2891 MISCELLANEOUS CHEMICAL PROD-----	799	454	-----	-----	304	41	-----	-----
2911 GASOLINE-----	116,447	-----	53,675	6,997	-----	12,905	42,870	-----
2914 DISTILLATE FUEL OIL-----	72,928	-----	41,075	-----	-----	11,802	20,051	-----
2915 RESIDUAL FUEL OIL-----	145,235	-----	85,452	-----	-----	46,232	53,551	-----
2916 LUBRICATING OILS AND GREASES-----	10	1	-----	-----	8	1	-----	-----
2917 NAPHTHA, PETROLEUM SOLVENTS-----	4,790	26	4,764	-----	-----	-----	-----	-----
2918 ASPHALT, TAR, AND BITUMENS-----	344,253	-----	5,354	7,753	-----	35,019	292,676	3,451
2920 COKE, PETROLEUM COKE-----	1,030,118	334,320	599,672	39,330	9,536	47,256	-----	-----
2951 ASPHALT BUILDING MATERIALS-----	326	-----	-----	-----	-----	326	-----	-----
2991 PETROLEUM AND COAL PROD, NEC-----	10	-----	-----	-----	10	-----	-----	-----
3011 RUBBER AND MISC PLASTIC PROD-----	213	47	-----	-----	111	55	-----	-----
3111 LEATHER AND LEATHER PRODUCTS-----	23	-----	-----	-----	4	19	-----	-----
3211 GLASS AND GLASS PRODUCTS-----	117	-----	-----	-----	108	9	-----	-----
3241 BUILDING CEMENT-----	1,047,655	-----	7,121	600,922	-----	-----	439,612	-----
3251 STRUCTURAL CLAY PRODUCTS-----	1	-----	-----	-----	-----	1	-----	-----
3291 CUT STONE AND STONE PRODUCTS-----	42	-----	-----	-----	21	21	-----	-----
3291 MISC NONMETALLIC MINERAL PROD-----	40	40	-----	-----	2	4	-----	-----
3312 SLAG-----	68,148	-----	-----	-----	-----	-----	68,148	-----
3314 IRON AND STEEL PRIMARY FORMS-----	15,566	15,566	-----	-----	-----	-----	-----	-----
3315 IRON, STEEL SHAPES, ETC SHEET-----	2,743	1,232	-----	-----	14	1,537	-----	-----
3316 IRON AND STEEL PLATES, SHEETS-----	17,531	8,591	-----	-----	8,940	-----	-----	-----
3317 IRON AND STEEL PIPE AND TUBE-----	418	-----	-----	-----	418	-----	-----	-----
3319 IRON AND STEEL PRODUCTS, NEC-----	2,191	2,177	-----	-----	2	12	-----	-----
3321 NONFERROUS METALS, NEC-----	148	-----	-----	-----	20	128	-----	-----
3322 COPPER ALLOYS, UNWORKED-----	33	-----	-----	-----	33	-----	-----	-----
3323 LEAD AND ZINC, UNWORKED-----	3	-----	-----	-----	-----	3	-----	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	22	-----	-----	-----	22	-----	-----	-----
3411 FABRICATED METAL PRODUCTS-----	1,299	256	-----	-----	167	36	840	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	9,289	8,041	-----	-----	464	784	-----	-----
3611 ELECTRICAL MACH AND EQUIP-----	792	544	-----	-----	191	57	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	737	150	2	-----	458	127	-----	-----
3731 SHIPS AND BOATS-----	242	233	-----	-----	2	7	-----	-----
3791 MISC TRANSPORTATION EQUIPMENT-----	53	19	-----	-----	28	6	-----	-----

# DETROIT, MI, DISTRICT

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DETROIT RIVER, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

UNBROKEN--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	THROUGH TRAFFIC			RECEIPTS AND SHIPMENTS			
		FOREIGN		DOMESTIC	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN	LAKEWISE	OVERSEAS	CANADIAN	LAKEWISE	OTHER
3811 INSTN, TIME, PHOTO, OPT GOODS-----	1,126	0	-----	-----	979	143	-----	-----
3911 WISC MANUFACTURED PRODUCTS-----	13	0	-----	-----	7	-----	-----	-----
4011 IRON AND STEEL SCRAP-----	1,058,340	354,323	14,141	-----	685,876	-----	-----	-----
4012 NONFERROUS METAL SCRAP-----	334	-----	-----	-----	313	21	-----	-----
4022 TEXTILE WASTE, SCRAP, SWEEP-----	27	-----	-----	-----	17	10	-----	-----
4112 COMMODITIES, NEC-----	1,291	951	11	-----	222	107	-----	-----
9999 DEPARTMENT OF DEFENSE AND SCI-----	107	107	-----	-----	-----	-----	-----	-----
THUS, ALL TRAFFIC, 61,733,266.								
TOW-HILES, ALL TRAFFIC, 1,628,089,526.								

DETROIT HARBOR, MICH. (INCLUDED IN PORT OF DETROIT)

SECTION INCLUDED: U.S. BANK OF DETROIT RIVER FROM LAKE ST. CLAIR TO WESTERN EXTREME OF ZUG ISLAND. CONTROLLING DEPTH: CHANNEL NORTH OF BELLE ISLE 21 FEET, REMAINDER OF RIVER 25-29.5 FEET. PROJECT DEPTH: 29.5 FEET EXCEPT CHANNEL NORTH OF BELLE ISLE, 21 FEET.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	7,856,870	696,070	1982-----	4,322,608	369,388
1978-----	9,005,915	866,866	1983-----	5,015,656	879,146
1979-----	9,316,331	831,840	1984-----	5,530,227	1,448,992
1980-----	9,894,627	484,708	1985-----	5,040,518	1,047,594
1981-----	5,143,155	356,694	1986-----	5,083,799	977,736

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC	
		OVERSEAS		CANADIAN		LAKEWISE	LOCAL
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	
TOTAL-----	5,083,799	462,091	207,618	379,348	80,833	3,950,458	3,451
0103 CORN-----	2,281	-----	2,120	-----	161	-----	-----
0111 SOYBEANS-----	78	-----	78	-----	-----	-----	-----
0129 FIELD CROPS, NEC-----	57	57	-----	-----	-----	-----	-----
0141 FRESH AND FROZEN VEGETABLES-----	3,472	7	2,736	-----	729	-----	-----
0161 ANIMALS AND PRODUCTS, NEC-----	391	317	16	58	-----	-----	-----
0191 MISCELLANEOUS FARM PRODUCTS-----	2	2	-----	-----	-----	-----	-----
0841 CRUDE RUBBER AND ALLIED GUMS-----	105	74	-----	31	-----	-----	-----
0861 FOREST PRODUCTS, NEC-----	142	120	-----	22	-----	-----	-----
1011 IRON ORE AND CONCENTRATES-----	1,786,249	-----	-----	86,697	-----	1,699,552	-----
1051 ALUMINUM ORE, CONCENTRATES-----	1	1	-----	-----	-----	-----	-----
1061 MANGANESE ORE, CONCENTRATES-----	14,590	14,590	-----	-----	-----	-----	-----
1091 NONFERROUS METS, CONCENT, NEC-----	7	7	-----	7	-----	-----	-----
1121 COAL AND LIGNITE-----	1,263,380	-----	-----	-----	-----	1,263,380	-----
1311 CRUDE PETROLEUM-----	2,209	-----	-----	2,209	-----	-----	-----
1411 LIMESTONE-----	493,171	-----	-----	-----	24,541	468,630	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	284	-----	-----	284	-----	-----	-----
1451 CLAY-----	318	81	198	1	38	-----	-----
1499 NONMETALLIC MINERALS, NEC-----	146,088	73	-----	146,015	-----	-----	-----
2911 ORNANCE AND ACCESSORIES-----	166	48	-----	118	-----	-----	-----
2011 MEAT, FRESH, CHILLED, FROZEN-----	20	-----	20	-----	-----	-----	-----
2012 MEAT AND PRODUCTS, NEC-----	56	10	-----	46	-----	-----	-----
2014 TALLOW, ANIMAL FATS AND OILS-----	20,560	-----	20,560	-----	-----	-----	-----
2015 ANIMAL BY-PRODUCTS, NEC-----	2,195	20	1,644	136	395	-----	-----
2034 VEGETABLES AND PREP, NEC-----	767	244	-----	523	-----	-----	-----
2039 PREP FRUIT AND VEG JUICE, NEC-----	3,699	896	-----	2,803	-----	-----	-----
2042 ANIMAL FEEDS-----	252	233	19	-----	-----	-----	-----
2049 GRAIN MILL PRODUCTS, NEC-----	468	209	182	77	-----	-----	-----
2081 ALCOHOLIC BEVERAGE-----	5,377	2,376	48	2,943	10	-----	-----
2091 VEGETABLE OILS, MARG, SHORT-----	412	412	-----	-----	-----	-----	-----
2092 ANIMAL OILS AND FATS, NEC-----	73	73	-----	-----	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	1,174	985	26	163	-----	-----	-----
2211 BASIC TEXTILE PRODUCTS-----	541	262	31	246	2	-----	-----
2311 APPAREL-----	56	39	-----	17	-----	-----	-----
2411 LOGS-----	1,044	-----	1,044	-----	-----	-----	-----
2415 WOOD CHIPS, STAVES, WOODINGS-----	22	72	-----	-----	-----	-----	-----
2421 LUMBER-----	746	62	178	483	23	-----	-----
2431 VENEER, PLYWOOD, WORKED WOOD-----	2,069	98	1,775	68	128	-----	-----
2491 WOOD MANUFACTURES, NEC-----	76	51	-----	25	-----	-----	-----
2511 FURNITURE AND FIXTURES-----	1,833	1,526	-----	307	-----	-----	-----
2611 PULP-----	3,294	3,294	-----	-----	-----	-----	-----
2631 PAPER AND PAPERBOARD-----	2,107	1,348	70	488	201	-----	-----
2691 PULP AND PAPER PRODUCTS, NEC-----	528	253	64	211	-----	-----	-----
2711 PRINTED MATTER-----	337	149	18	37	133	-----	-----
2811 CRUDE TAR, OIL, GAS PRODUCTS-----	510	389	-----	121	-----	-----	-----
2812 DYES, PIGMENT, TANNING MATS-----	10	-----	10	-----	-----	-----	-----
2813 ALCOHOLS-----	2,664	507	1	2,156	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	8,849	4,128	539	4,135	47	-----	-----
2821 PLASTIC MATERIALS-----	3,301	1,238	1,005	1,007	51	-----	-----
2822 SYNTHETIC RUBBER-----	261	94	161	2	4	-----	-----
2823 SYNTHETIC (MAN-MADE) FIBERS-----	18	-----	-----	18	-----	-----	-----
2831 DRUGS-----	592	192	26	374	-----	-----	-----

## Waterborne Commerce of the United States, 1986

DETROIT HARBOR, MICH. (INCLUDED IN PORT OF DETROIT)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC	
		OVERSEAS		CANADIAN		LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	LOCAL
2841 SOAP-----	255	254	636	47	13		
2851 PAINTS-----	3,960	3,545		315			
2871 NITROGENOUS CHEM FERTILIZERS-----	4,871			4,871			
2872 POTASSIC CHEM FERTILIZERS-----	17,579			17,579			
2876 INSECTICIDES, DISINFECTANTS-----	1,134	545	264	215	110		
2879 FERTILIZER AND MATERIALS, NEC-----	178	119	22	37			
2891 MISCELLANEOUS CHEMICAL PROD-----	4,444	2,147	304	1,952	41		
2911 GASOLINE-----	6,454			6,454			
2914 DISTILLATE FUEL OIL-----	11,493			11,493	90		
2915 RESIDUAL FUEL OIL-----	66,028	5,606		27,121		33,301	
2916 LUBRICATING OILS AND GREASES-----	8,162		4	619	7,335		
2918 ASPHALT, TAR, AND PITCHES-----	13,676	25			6,400	3,802	3,451
2920 COKE, PETROLEUM COKE-----	56,792		9,536	8,424	38,832		
2951 ASPHALT BUILDING MATERIALS-----	161				163		
2991 PETROLEUM AND COAL PROD, NEC-----	41	11	10	20			
3011 RUBBER AND MISL PLASTIC PROD-----	2,546	1,844	111	495	54		
3111 LEATHER AND LEATHER PRODUCTS-----	157	119	4	64			
3211 GLASS AND GLASS PRODUCTS-----	1,025	436	104	478	9		
3241 BUILDING CEMENT-----	467,883	19,476		8		442,897	
3251 STRUCTURAL CLAY PRODUCTS-----	4,179	2,190		1,989			
3281 CUT STONE AND STONE PRODUCTS-----	7,144	1,117	21	945	21		
3291 MISC NONMETALLIC MINERAL PROD-----	636	431	2	199	4		
3312 SLAG-----	28,056					38,056	
3314 IRON AND STEEL PRIMARY FORMS-----	5,185	5,185					
3315 IRON, STEEL SHAPES, EXC SHEET-----	174,724	353,459	14	21,251			
3316 IRON AND STEEL PLATES, SHEETS-----	2,155	3	2,152				
3317 IRON AND STEEL PIPE AND TUBE-----	4,974	4,544	414	12			
3318 FERROALLOYS-----	2,343	1,445		898			
3319 IRON AND STEEL PRODUCTS, NEC-----	3,446	1,644	2	1,788	12		
3321 NONFERROUS METALS, NEC-----	1,805	738	20	1,038	9		
3322 COPPER ALLOYS, UNWORKED-----	867	653	33	201			
3323 LEAD AND ZINC, UNWORKED-----	2,626	2,273		350	3		
3324 ALUMINUM AND ALLOYS, UNWORKED-----	3,574	2,631	22	725			
3411 FABRICATED METAL PRODUCTS-----	9,954	3,440	165	4,579	30	840	
3511 MACHINERY, EXCEPT ELECTRICAL-----	12,426	6,541	440	4,672	773		
3611 ELECTRICAL MACH AND EQUIP-----	2,094	1,204	191	645	54		
3711 MOTOR VEHICLES, PARTS, EQUIP-----	11,135	3,463	447	7,102	123		
3731 SHIPS AND BOATS-----	90	73	2	8	7		
3791 MISC TRANSPORTATION EQUIPMENT-----	166	148	10	2	6		
3811 INSTR, TIME, PHOTO, OPT GOODS-----	1,733	296	979	315	143		
3911 MISC MANUFACTURED PRODUCTS-----	503	413	7	83			
4011 IRON AND STEEL SCRAP-----	159,160	454	158,565	136			
4012 NONFERROUS METAL SCRAP-----	399	43	313	22	21		
4022 TEXTILE WASTE, SCRAP, SWEEP-----	27		17		10		
4112 COMMODITIES, NEC-----	895	348	222	218	107		

ROUGE RIVER, MICH. (INCLUDED IN PORT OF DETROIT)

SECTION INCLUDED: FROM THE MOUTH OF THE SHORT CUT CANAL TO THE FORD MOTOR COMPANY, CONTROLLING DEPTH: 20 FEET FOR A MINIMUM WIDTH OF 100 FEET FROM THE MOUTH OF THE SHORT CUT TO DIX AVENUE BRIDGE, WITH THE EXCEPTION OF SOME SHOAL AREAS, AND 20 FEET IN THE TURNING BASIN, EXCEPT NEAR THE SHORE. PROJECT DEPTH: 21.0 AND 25 FEET FROM MOUTH OF SHORT CUT CANAL TO A POINT 200 FEET DOWNSTREAM OF THE JEFFERSON AVENUE BRIDGE; THENCE 21 FEET TO AND INCLUDING THE TURNING BASIN IN MAIN CHANNEL.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	12,055,627	1982-----	7,468,839
1978-----	11,494,251	1983-----	8,032,520
1979-----	12,492,054	1984-----	9,127,312
1980-----	10,277,336	1985-----	8,728,715
1981-----	9,633,840	1986-----	8,190,622

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC	
		OVERSEAS		CANADIAN		LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	8,190,622	280,274	415,360	697,163	78,712	6,410,806	304,850
0129 FIELD CROPS, NEC-----	13		13				
0841 CRUDE RUBBER AND ALLIED GUMS-----	9	9					
0861 FOREST PRODUCTS, NEC-----	72	22					
1011 IRON ORE AND CONCENTRATES-----	2,392,298			283,604		2,108,692	
1121 COAL AND LIGNITE-----	1,417,941					1,417,941	
1111 LIMESTONE-----	2,283,751				21,788	2,261,963	
1442 SAND, GRAVEL, CRUSHED ROCK-----	34,498			34,494			
1494 GYPSUM, CRUDE AND PLASTERS-----	300,229		20			300,209	
1499 NONMETALLIC MINERALS, NEC-----	426,919			325,634		101,281	
2015 ANIMAL BY-PRODUCTS, NEC-----	21		21				
2031 FISH AND SHELLFISH, PREPARED-----	39,341	21				39,360	
2042 ANIMAL FEEDS-----	22	22					
2049 GRAIN MILL PRODUCTS, NEC-----	11	11					
2081 ALCOHOLIC BEVERAGES-----	1,072	1,072					
2099 MISCELLANEOUS FOOD PRODUCTS-----	374	374					

## DETROIT, MI, DISTRICT

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EJUDGE RIVER, MICH. (INCLUDED IN PORT OF DETROIT)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC		LOCAL
		OVERSEAS		CANADIAN		LAKEWINE		
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	
2211 BASIC TEXTILE PRODUCTS-----	3	3						
2421 LUMBER-----	84		84					
2431 VENEER, PLYWOOD, WORKED WOOD-----	64		64					
2511 FURNITURE AND FIXTURES-----	23	23						
2631 PAPER AND PAPERBOARD-----	154	154						
2691 PULP AND PAPER PRODUCTS, NEC-----	1	1						
2711 PRINTED MATTER-----	5	5						
2811 CRUDE TAR, OIL, GAS PRODUCTS-----	20	20						
2817 BENZENE AND TOLUENE-----	28,780						28,780	
2819 BASIC CHEMICALS AND PROD, NEC-----	464	464						
2821 PLASTIC MATERIALS-----	154	154						
2822 SYNTHETIC RUBBER-----	6	6						
2831 DRUGS-----	93	93						
2841 SOAP-----	43	19	24					
2851 PAINTS-----	7	7						
2872 POTASSIC CHEM FERTILIZERS-----	21,431		21,431					
2876 INSECTICIDES, DISINFECTANTS-----	21	21						
2879 FERTILIZER AND MATERIALS, NEC-----	10,552	10,552						
2891 MISCELLANEOUS CHEMICAL PROD-----	78	78						
2911 GASOLINE-----	3,062		3,062					
2912 JET FUEL-----	6,621				6,621			
2914 DISTILLATE FUEL OIL-----	9,571				9,571			
2915 RESIDUAL FUEL OIL-----	39,480			8,707	664		30,109	
2916 LUBRICATING OILS AND GREASES-----	11,286				11,286			
2918 ASPHALT, TAR, AND BITUMENS-----	320,944				28,619	81,546	205,328	3,451
2951 ASPHALT BUILDING MATERIALS-----	163				163			
3011 RUBBER AND MISC PLASTIC PROD-----	716	717		1				
3111 LEATHER AND LEATHER PRODUCTS-----	7	7						
3211 GLASS AND GLASS PRODUCTS-----	109	61		48				
3251 STRUCTURAL CLAY PRODUCTS-----	314	314						
3281 CUT STONE AND STONE PRODUCTS-----	21	21						
3291 MISC NONMETALLIC MINERAL PROD-----	30	23		7				
3312 SLAG-----	158,546		20,095			97,814	40,637	
3314 IRON AND STEEL PRIMARY FORMS-----	14,545	14,545						
3315 IRON, STEEL SHAPES, EXC SHEET-----	238,807	238,807						
3316 IRON AND STEEL PLATES, SHEETS-----	2,359	5	2,354					
3317 IRON AND STEEL PIPE AND TUBE-----	931	931						
3318 FERROALLOYS-----	5,512	5,512						
3319 IRON AND STEEL PRODUCTS, NEC-----	44	44						
3321 NONFERROUS METALS, NEC-----	20	20						
3322 COPPER ALLOYS, UNWORKED-----	3	3						
3324 ALUMINUM AND ALLOYS, UNWORKED-----	184	184						
3411 FABRICATED METAL PRODUCTS-----	378	357	2	19				
3511 MACHINERY, EXCEPT ELECTRICAL-----	5,209	5,160	24	25				
3611 ELECTRICAL MACH AND EQUIP-----	64	64						
3711 MOTOR VEHICLES, PARTS, EQUIP-----	315	280	11	24				
3811 INSTR, TIME, PHOTO, OPT GOODS-----	15	15						
3911 MISC MANUFACTURED PRODUCTS-----	27	25		2				
4011 IRON AND STEEL SCRAP-----	412,783		412,783					
4112 COMMODITIES, NEC-----	48	48						

ECORSE, MICH. (INCLUDED IN PORT OF DETROIT)

SECTION INCLUDED: U.S. SHORE OF DETROIT RIVER FROM GREAT LAKES A.E. TO ECORSE RIVER. CONTROLLING DEPTH: 20 FEET. PROJECT DEPTH: NONE.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	902,054	1982-----	152,788
1978-----	726,162	1983-----	390,485
1979-----	310,877	1984-----	553,793
1980-----	369,818	1985-----	440,161
1981-----	182,540	1986-----	400,071

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS		LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	RECEIPTS
TOTAL-----	400,071	269,183	102,221	10,661	18,006
1499 NONMETALLIC MINERALS, NEC-----	16,206			3,000	13,206
1911 ORDNANCE AND ACCESSORIES-----	1			1	
2039 PREP FRUIT AND VEG JUICE, NEC-----	46			46	
2042 ANIMAL FEEDS-----	96	96			
2081 ALCOHOLIC BEVERAGES-----	95	95			
2211 BASIC TEXTILE PRODUCTS-----	23			23	
2311 APPAREL-----	3	3			
2511 FURNITURE AND FIXTURES-----	17	11		6	
2631 PAPER AND PAPERBOARD-----	1			1	
2819 BASIC CHEMICALS AND PROD, NEC-----	130	104		26	
2821 PLASTIC MATERIALS-----	10			10	
2841 SOAP-----	17			17	

## Waterborne Commerce of the United States, 1986

ECORSE, MICH. (INCLUDED IN PORT OF DETROIT)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS		CANADIAN	LAKELAND
		IMPORTS	EXPORTS	IMPORTS	RECEIPTS
2851 PAINTS-----	84	84	-----	-----	-----
2891 MISCELLANEOUS CHEMICAL PROD-----	110	40	-----	70	-----
2915 RESIDUAL FUEL OIL-----	9,747	-----	-----	4,947	4,800
2916 LUBRICATING OILS AND GREASES-----	7	7	-----	-----	-----
3011 RUBBER AND MISC PLASTIC PROD-----	44	42	-----	6	-----
3111 LEATHER AND LEATHER PRODUCTS-----	2	2	-----	-----	-----
3211 GLASS AND GLASS PRODUCTS-----	40	30	-----	10	-----
3251 STRUCTURAL CLAY PRODUCTS-----	22	1	-----	21	-----
3291 MISC NONMETALLIC MINERAL PROD-----	25	20	-----	5	-----
3314 IRON AND STEEL PRIMARY FORMS-----	82,043	82,043	-----	-----	-----
3315 IRON, STEEL SHAPES, ETC SHEET-----	175,883	174,271	-----	1,612	-----
3316 IRON AND STEEL PLATES, SHEETS-----	4,434	-----	4,434	-----	-----
3317 IRON AND STEEL PIPE AND TUBE-----	2,345	2,345	-----	-----	-----
3319 IRON AND STEEL PRODUCTS, NEC-----	293	213	-----	80	-----
3321 NONFERROUS METALS, NEC-----	313	-----	-----	313	-----
3322 COPPER ALLOYS, UNWORKED-----	52	-----	-----	52	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	131	111	-----	20	-----
3411 FABRICATED METAL PRODUCTS-----	315	139	-----	176	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	9,231	9,194	-----	37	-----
3611 ELECTRICAL MACH AND EQUIP-----	237	234	-----	3	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	704	76	-----	128	-----
3731 SHIPS AND BOATS-----	11	11	-----	-----	-----
3791 MISC TRANSPORTATION EQUIPMENT-----	14	-----	14	-----	-----
3811 INSTR, TIME, PHOTO, OPT GOODS-----	14	11	-----	3	-----
4011 IRON AND STEEL SCRAP-----	97,769	-----	97,769	-----	-----

TRENTON, MICH. (INCLUDED IN PORT OF DETROIT)

SECTION INCLUDES: U.S. SHORE OF DETROIT RIVER FROM FOOT OF SIMLEY ROAD TO FOOT OF PARKWAY DRIVE. CONTROLLING AND PROJECT DEPTHS: 28 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	3,131,059	1982-----	1,105,440
1978-----	3,704,651	1983-----	1,385,546
1979-----	3,615,549	1984-----	2,083,602
1980-----	2,652,790	1985-----	1,298,067
1981-----	2,569,700	1986-----	1,306,393

\* PASSENGERS--238,442.

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		CANADIAN		LAKELAND	
		IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	1,346,593	28,285	6,875	1,298,312	62,921
1011 IRON ORE AND CONCENTRATES-----	1,098,607	-----	-----	1,098,607	-----
1121 COAL AND LIGNITE-----	20,442	-----	-----	20,442	-----
1411 LIMESTONE-----	129,263	-----	-----	129,263	-----
2911 GASOLINE-----	56,202	6,457	6,875	-----	42,870
2914 DISTILLATE FUEL OIL-----	20,051	-----	-----	-----	20,051
2915 RESIDUAL FUEL OIL-----	21,828	21,828	-----	-----	-----

PORT OF DETROIT, MICH.

SECTION INCLUDES: DETROIT HARBOR, ROUGE RIVER, ECORSE, WYANDOTTE, RIVERVIEW AND TRENTON. CONTROLLING AND PROJECT DEPTHS: SEE FOREMENTIONED PROJECTS.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	25,092,847	896,072	1982-----	13,176,099	369,308
1978-----	25,981,508	866,866	1983-----	14,955,003	879,146
1979-----	24,995,987	831,860	1984-----	17,530,626	1,617,966
1980-----	19,268,443	484,708	1985-----	15,612,344	1,219,480
1981-----	17,839,139	356,694	1986-----	15,219,322	977,736

## DETROIT, MI, DISTRICT

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PORT OF DETROIT, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC		LOCAL
		OVERSEAS		CANADIAN		LAKEWISE		
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	
TOTAL-----	15,219,322	1,011,550	741,950	1,128,156	159,942	11,806,440	567,775	3,451
0103 CORN-----	2,281		2,120		161			
0111 SOYBEANS-----	78		76					
0129 FIELD CROPS, NEC-----	70	57	13					
0141 FRESH AND FROZEN VEGETABLES-----	3,472	7	2,736		729			
0161 ANIMALS AND PRODUCTS, NEC-----	591	517	16	5A				
0191 MISCELLANEOUS FARM PRODUCTS-----	2	2						
0841 CRUDE RUBBER AND ALLIED GUMS-----	114	83		31				
0861 FOREST PRODUCTS, NEC-----	164	142		22				
1011 IRON ORE AND CONCENTRATES-----	5,363,044			470,303		4,992,786		
1051 ALUMINUM ORES, CONCENTRATES-----	1	1						
1061 MANGANESE ORES, CONCENTRATES-----	14,590	14,590						
1091 NONFERROUS ORES, CONCENT, NEC-----	7			7				
1121 COAL AND LIGNITE-----	2,794,736					2,794,736		
1311 CRUDE PETROLEUM-----	2,204			2,204				
1411 LIMESTONE-----	2,906,185				46,329	2,859,856		
1442 SAND, GRAVEL, CRUSHED ROCK-----	34,782			34,782				
1451 CLAY-----	318	81	198	1	38			
1494 GYPSUM, CRUDE AND PLASTERS-----	300,229		20			300,209		
1499 NONMETALLIC MINERALS, NEC-----	589,415	73		474,653		114,447		
1911 SHOVANCE AND ACCESSORIES-----	167	48		119				
2011 MEAT, FRESH, CHILLED, FROZEN-----	20		20					
2012 MEAT AND PRODUCTS, NEC-----	56	10		4A				
2014 TALLOW, ANIMAL FATS AND OILS-----	20,560		20,560					
2015 ANIMAL BY-PRODUCTS, NEC-----	2,216	20	1,665	15A	395			
2031 FISH AND SHELLFISH, PREPARED-----	39,381	21				39,360		
2034 VEGETABLES AND PREP, NEC-----	767	244		523				
2039 PREP FRUIT AND VEG JUICE, NEC-----	3,745	436		2,849				
2042 ANIMAL FLESH-----	370	351	19					
2049 GRAIN MILL PRODUCTS, NEC-----	479	220	182	77				
2081 ALCOHOLIC BEVERAGES-----	6,544	3,543	48	2,943	10			
2091 VEGETABLE OILS, RAW, SHORT-----	412	412						
2092 ANIMAL OILS AND FATS, NEC-----	73	73						
2099 MISCELLANEOUS FOOD PRODUCTS-----	1,548	1,359	26	163				
2211 BASIC TEXTILE PRODUCTS-----	567	265	31	269	2			
2311 APPAREL-----	59	42		17				
2411 LOGS-----	1,044		1,044					
2416 WOOD CHIPS, STAVES, WILDLINGS-----	22	22						
2421 LUMBER-----	790	62	222	483	23			
2431 VENEER, PLYWOOD, WORKED WOOD-----	2,133	98	1,839	68	128			
2491 WOOD MANUFACTURES, NEC-----	76	51		25				
2511 FURNITURE AND FIXTURES-----	1,873	1,560		313				
2611 PULP-----	3,294	3,294						
2631 PAPER AND PAPERBOARD-----	2,262	1,502	70	499	201			
2691 PULP AND PAPER PRODUCTS, NEC-----	529	254	64	211				
2711 PRINTED MATTER-----	342	154	18	37	133			
2811 CRUDE TAR, OIL, GAS PRODUCTS-----	530	409		121				
2812 DYES, PIGMENT, TANNING MATS-----	10		10					
2813 ALCOHOLS-----	2,664	507	1	2,156				
2817 BENZENE AND TOLUENE-----	28,780					28,780		
2819 BASIC CHEMICALS AND PROD, NEC-----	9,445	4,698	539	4,161	47			
2821 PLASTIC MATERIALS-----	3,445	1,392	1,005	1,017	51			
2822 SYNTHETIC RUBBER-----	267	100	161	2	4			
2823 SYNTHETIC (MAN-MADE) FIBERS-----	18			18				
2831 DRUGS-----	685	285	26	374				
2841 SOAP-----	1,015	278	660	64	13			
2851 PAINTS-----	3,951	3,636		315				
2871 NITROGENOUS CHEM FERTILIZERS-----	4,871			4,871				
2872 POTASSIC CHEM FERTILIZERS-----	39,016			39,016				
2876 INSECTICIDES, DISINFECTANTS-----	1,159	566	268	215	110			
2879 FERTILIZER AND MATERIALS, NEC-----	10,730	10,671	22	37				
2891 MISCELLANEOUS CHEMICAL PROD-----	4,632	2,265	304	2,022	41			
2911 GASOLINE-----	65,718			15,973	6,875	42,870		
2912 JET FUEL-----	6,621				6,621			
2914 DISTILLATE FUEL OIL-----	43,782			14,070	9,661	20,051		
2915 RESIDUAL FUEL OIL-----	147,155	5,606		72,675	664	38,101	30,109	
2916 LUBRICATING OILS AND GREASES-----	19,455	7	8	819	18,621			
2918 ASPHALT, TAR, AND BITUMENS-----	224,691	23			28,541	87,348	205,328	3,451
2920 COKE, PETROLEUM COKE-----	56,792		4,536	8,424	39,832			
2951 ASPHALT BUILDING MATERIALS-----	326				326			
2991 PETROLEUM AND COAL PROD, NEC-----	41	11	10	20				
3011 RUBBER AND MISC PLASTIC PROD-----	3,314	2,647	111	502	54			
3111 LEATHER AND LEATHER PRODUCTS-----	196	128	4	64				
3211 GLASS AND GLASS PRODUCTS-----	1,182	521	108	544	9			
3241 BUILDING CEMENT-----	462,483	19,978		8		442,897		
3251 STRUCTURAL CLAY PRODUCTS-----	4,513	2,505		2,010				
3281 CUT STONE AND STONE PRODUCTS-----	2,165	1,138	21	485	21			
3291 MISC NONMETALLIC MINERAL PROD-----	691	474	2	211	4			
3312 SLAG-----	196,402			20,095		135,870	40,637	
3314 IRON AND STEEL PRIMARY FORMS-----	101,773	101,773						
3315 IRON, STEEL SHAPES, EXC SHEET-----	766,414	766,537		22,863				
3316 IRON AND STEEL PLATES, SHEETS-----	8,948	8	8,940					
3317 IRON AND STEEL PIPE AND TUBE-----	8,250	7,820	418	12				
3318 FERROALLOYS-----	7,855	6,957		898				
3319 IRON AND STEEL PRODUCTS, NEC-----	3,783	1,901	2	1,868	12			
3321 NONFERROUS METALS, NEC-----	2,138	758	20	1,351	9			
3322 COPPER ALLOYS, UNWORKED-----	942	656	33	253				
3323 LEAD AND ZINC, UNWORKED-----	2,676	2,273		350	3			
3324 ALUMINUM AND ALLOYS, UNWORKED-----	3,893	3,126	22	745				
3411 FABRICATED METAL PRODUCTS-----	9,747	3,936	167	4,774	30	840		
3511 MACHINERY, EXCEPT ELECTRICAL-----	26,866	20,895	464	4,734	773			
3611 ELECTRICAL MACH AND EQUIP-----	2,395	1,502	191	648	54			
3711 MOTOR VEHICLES, PARTS, EQUIP-----	11,654	3,819	458	7,254	123			

# Waterborne Commerce of the United States, 1986

PORT OF DETROIT, MICH.--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC		LOCAL
		OVERSEAS		CANADIAN		LAKEWISE		
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	
3731 SHIPS AND BOATS-----	101	80	2	8	7	-----	-----	-----
3791 MISC TRANSPORTATION EQUIPMENT-----	184	148	28	2	6	-----	-----	-----
3811 INSTR, TIME, PHOTO, OPT GOODS-----	1,762	322	979	318	183	-----	-----	-----
3911 MISC MANUFACTURED PRODUCTS-----	530	438	7	85	-----	-----	-----	-----
4011 IRON AND STEEL SCRAP-----	686,471	459	685,876	136	-----	-----	-----	-----
4012 NONFERROUS METAL SCRAP-----	309	43	313	27	21	-----	-----	-----
4022 TEXTILE WASTE, SCRAP, SWEEP-----	27	-----	17	-----	10	-----	-----	-----
4112 COMMODITIES, NEC-----	943	396	222	218	107	-----	-----	-----

MORRIS HARBOR, MICH.

SECTION INCLUDED: CHANNEL IN LAKE ERIE AND 12,300 FEET ABOVE HATSTY RIVER. CONTROLLING DEPTH: 20 FEET IN TURNING BASIN OVER A CENTER WIDTH OF 150 FEET; 12 FEET IN TURNING BASIN EXCEPT NEAR THE SHORE; 5.5 FEET IN 9 FOOT CHANNEL. PROJECT DEPTH: 21 FEET TO THE TURNING BASIN; 15 FEET IN THE TURNING BASIN; 9 FEET TO LOWER DOCKS AT MONROE. NAVIGATION SEASON: APPROXIMATELY 20 APRIL TO 14 DECEMBER.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	1,521,346	-----	1982-----	2,401,441	-----
1978-----	2,374,166	-----	1983-----	2,569,992	-----
1979-----	2,662,788	-----	1984-----	2,398,780	-----
1980-----	2,768,541	-----	1985-----	792,884	-----
1981-----	2,781,958	-----	1986-----	622,757	-----

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC
		CANADIAN		LAKEWISE
		IMPORTS	EXPORTS	RECEIPTS
TOTAL-----	622,757	27,672	19	595,066
1011 IRON ORE AND CONCENTRATES-----	25,687	25,687	-----	-----
1121 COAL AND LIGNITE-----	565,626	-----	-----	565,626
1494 GYPSUM, CRUDE AND PLASTERS-----	19	-----	19	-----
2421 LUMBER-----	1,985	1,985	-----	-----
2920 COKE, PETROLEUM COKE-----	29,440	-----	-----	29,440

## LIFE-HARBORS AND WATERWAYS

HARBOR OR WATERWAY	COMMODITY	TONS	PASSENGERS
PROJECT			
ALCOA HARBOR, MICH.,-----	NO COMMERCE REPORTED		
ALCOA, MICH. (INCLUDED IN ST. CLAIR RIVER)-----			83,610
AJ SABLE HARBOR AND RIVER (ISCHUA), MICH.,-----	NO COMMERCE REPORTED		
BIG BAY HARBOR, MICH.,-----	NO COMMERCE REPORTED		
BLACK RIVER HARBOR, MICH.,-----	NO COMMERCE REPORTED		
CASEVILLE, MICH.,-----	NO COMMERCE REPORTED		
CEAR RIVER HARBOR, MICH.,-----	NO COMMERCE REPORTED		
CHARLEVOIX HARBOR, MICH.,-----	1121 COAL AND LIGNITE-----	49,284	
	1411 Limestone-----	622	
	1241 BUILDING CEMENT-----	7,121	
	3511 MACHINERY, EXCEPT ELECTRICAL-----	261	
	4112 COMMODITIES, NEC-----	2,165	
	TOTAL-----	59,453	20,510
CHEBOYGAN HARBOR, MICH.,-----	1121 COAL AND LIGNITE-----	15,159	
	2911 GASOLINE-----	69,001	
	2914 DISTILLATE FUEL OIL-----	28,404	
	TOTAL-----	112,564	15,285
DETROIT, MICH., AND VICINITY (INCLUDED IN ST. MARYS RIVER)-----			245,059
DETROIT HARBOR, MICH.,-----	0911 FRESH FISH, EXCEPT SHELLFISH-----	209	
	2911 GASOLINE-----	940	
	2914 DISTILLATE FUEL OIL-----	626	
	4112 COMMODITIES, NEC-----	4,445	
	TOTAL-----	6,220	193,803
EAGLE HARBOR, MICH.,-----	NO COMMERCE REPORTED		
FRANKFORT HARBOR, MICH.,-----	1411 Limestone-----	9,527	
	2914 ASPHALT, TAR, AND PITCHES-----	60,247	
	TOTAL-----	69,774	
GLADSTONE HARBOR, MICH.,-----	1121 COAL AND LIGNITE-----	13,350	
	1411 Limestone-----	17,891	
	2915 RESIDUAL FUEL OIL-----	6,000	
	2918 ASPHALT, TAR, AND PITCHES-----	5,500	
	TOTAL-----	42,741	
GRAND MARAIS HARBOR (HARBOR OF REFUGE), MICH.,-----	1411 Limestone-----	6,672	
GRAND TRAVERSE BAY HARBOR, MICH.,-----	0911 FRESH FISH, EXCEPT SHELLFISH-----	12	
HARBOR BEACH, MICH., HARBOR OF REFUGE, LAKE MICHIGAN-----	1121 COAL AND LIGNITE-----	109,951	
HARRISVILLE HARBOR, MICH., HARBOR OF REFUGE, LAKE MICHIGAN-----	NO COMMERCE REPORTED		
KENOSHA HARBOR, MICH.,-----	0141 FRESH AND FROZEN VEGETABLES-----	70	
	1451 CLAY-----	6	
	2012 MEAT AND PRODUCTS, NEC-----	20	
	2022 DRIED MILK AND CREAM-----	384	
	2031 FISH AND SHELLFISH, PREPARED-----	1	
	2034 VEGETABLES AND PREP, NEC-----	20	
	2041 WHEAT FLOUR AND SEMOLINA-----	4,814	
	2049 GRAIN MILL PRODUCTS, NEC-----	18,668	
	2091 VEGETABLE OILS, MARG, SHORT-----	6,499	
	2099 MISCELLANEOUS FOOD PRODUCTS-----	6,410	
	2711 PRINTED MATTER-----	2	
	2819 BASIC CHEMICALS AND PROD, NEC-----	31	
	2851 PAINTS-----	22	
	3316 IRON AND STEEL PLATES, SHEETS-----	23	
	3411 FABRICATED METAL PRODUCTS-----	65	
	3511 MACHINERY, EXCEPT ELECTRICAL-----	665	
	3611 ELECTRICAL MACH AND EQUIP-----	36	
	3711 MOTOR VEHICLES, PARTS, EQUIP-----	7	
	4112 COMMODITIES, NEC-----	16	
	TOTAL-----	37,759	
KENEENAW WATERWAY, MICH.,-----	0911 FRESH FISH, EXCEPT SHELLFISH-----	112	
	1121 COAL AND LIGNITE-----	52,145	
	TOTAL-----	52,257	15,437
LAC LA BELLE HARBOR, MICH.,-----	NO COMMERCE REPORTED		
LELAND HARBOR, MICH.,-----	NO COMMERCE REPORTED		
LIVE ISLAND, MICH. (INCLUDED IN ST. MARYS RIVER)-----	NO COMMERCE REPORTED		
MACKINAC HARBOR, MICH.,-----	1411 Limestone-----	22,325	
	1442 SAND, GRAVEL, CRUSHED ROCK-----	408	
	2918 ASPHALT, TAR, AND PITCHES-----	3,316	
	4112 COMMODITIES, NEC-----	10,705	
	TOTAL-----	36,754	938,575
MACKINAC CITY HARBOR, MICH.,-----	2911 GASOLINE-----	107,767	

## OTHER HARBORS AND WATERWAYS--CONTINUED

HARBOR OR WATERWAY	COMMODITY	TONS	PASSENGERS
PROJECT--CONTINUED			
MACLENA CITY HARBOR, MICH. (CONTINUED)	2914 DISTILLATE FUEL OIL	34,408	
	TOTAL	142,175	258,517
MANISTIQUE HARBOR, MICH.	1121 COAL AND LIGNITE	4,286	
MARYSVILLE, MICH. (INCLUDED IN ST. CLAIR RIVER)	1121 COAL AND LIGNITE	177,942	
	1499 NONMETALLIC MINERALS, NEC	15,251	
	2915 RESIDUAL FUEL OIL	17,238	
	TOTAL	210,431	
MEWAHSEE HARBOR AND RIVER, MICH. AND WIS.	1121 COAL AND LIGNITE	112,222	
	1499 NONMETALLIC MINERALS, NEC	75,033	
	3311 PIG IRON	2,582	
	TOTAL	189,837	
NEW BUFFALO HARBOR MICHIGAN	NO COMMERCE REPORTED		
ODONTO HARBOR, WIS.	NO COMMERCE REPORTED		
PENSAUKEE HARBOR, WIS.	NO COMMERCE REPORTED		
PENINATEL HARBOR, MICH.	NO COMMERCE REPORTED		
PORT SAVILAC HARBOR, MICH.	NO COMMERCE REPORTED		
PUT-IL-AY HARBOR, MICH.	2911 GASOLINE	6	
	2913 KEROSENE	13	
	2921 LIQUEFIED GASES	326	
	4112 COMMODITIES, NEC	4,420	
	TOTAL	4,765	529,042
RACINE HARBOR, WIS.	NO COMMERCE REPORTED		
ROGERS CITY, MICH.	NO COMMERCE REPORTED		
SAUGATUCK HARBOR AND KALAMAZOO RIVER, MICH.			22,464
SAULT STE. MARIE, MICH. (INCLUDED IN ST. MARYS RIVER)	1411 LIMESTONE	43,401	
	2411 LOGS	4,568	
	2491 WOOD MANUFACTURES, NEC	1	
	2491 PULP AND PAPER PRODUCTS, NEC	1	
	2819 BASIC CHEMICALS AND PROD, NEC	19	
	2831 DRUGS	7	
	2874 INSECTICIDES, DISINFECTANTS	4	
	2911 GASOLINE	33,340	
	2914 DISTILLATE FUEL OIL	28,250	
	3011 RUBBER AND MISC PLASTIC PROD	4	
	3111 LEATHER AND LEATHER PRODUCTS	1	
	3211 GLASS AND GLASS PRODUCTS	1	
	3411 FABRICATED METAL PRODUCTS	2,611	
	3511 MACHINERY, EXCEPT ELECTRICAL	12	
	3611 ELECTRICAL MACH AND EQUIP	1	
	3911 MISC MANUFACTURED PRODUCTS	1	
	TOTAL	112,222	617,914
SEBASTIAN, MICH.	NO COMMERCE REPORTED		
SOUTH HAVEN HARBOR, MICH.	NO COMMERCE REPORTED		
ST. JAMES (BEAVER ISLAND), MICH.	4112 COMMODITIES, NEC	2,165	20,530
TWO RIVERS HARBOR, WIS.	2871 NITROGENOUS CHEM FERTILIZERS	5,105	
WHITE LAKE HARBOR, MICH.	NO COMMERCE REPORTED		
WHITEFISH POINT HARBOR, MICH.	NO COMMERCE REPORTED		
WYANDOTTE, MICH. (INCLUDED IN PORT OF DETROIT)	1121 COAL AND LIGNITE	92,973	
UNPROJECT			
ALABASTER, MICH.	1411 LIMESTONE	9,279	
	1494 GYPSUM, CRUDE AND PLASTERS	618,963	
	TOTAL	628,242	
CALCITE, MICH.	1411 LIMESTONE	6,843,000	
	2211 BASIC TEXTILE PRODUCTS	59	
	TOTAL	6,843,059	
ESCANABA, MICH.	1011 IRON ORE AND CONCENTRATES	8,247,919	
	1121 COAL AND LIGNITE	314,101	
	1411 LIMESTONE	25,270	
	1499 NONMETALLIC MINERALS, NEC	17,295	
	2810 SODIUM HYDROXIDE	7,104	
	2819 BASIC CHEMICALS AND PROD, NEC	4,301	
	2911 GASOLINE	55,789	
	2912 JET FUEL	7,152	
	2914 DISTILLATE FUEL OIL	43,304	
	TOTAL	8,720,235	
HARBLEHEAD, OHIO	1011 LIMESTONE	841,029	

## OTHER BARRIERS AND WATERWAYS--CONTINUED

WATERWAY OR WATERWAY	COMMODITY	TONS	PASSENGERS
WATERWAY--CONTINUED			
WATERWAY, MI (CONTINUED)	1442 SAND, GRAVEL, CRUSHED ROCK-----	6,420	-----
	1411 MACHINERY, EXCEPT ELECTRICAL-----	1,368	-----
	1791 AIRCRAFT TRANSPORTATION EQUIPMENT-----	558	-----
	TOTAL-----	849,375	168,926
WATERWAY, MI	1411 LIMESTONE-----	1,705,472	-----
	1442 SAND, GRAVEL, CRUSHED ROCK-----	16,841	-----
	TOTAL-----	1,722,313	-----
WATERWAY, MI	1411 LIMESTONE-----	10,010	-----
	1490 GYPSUM, CRUDE AND PLASTERS-----	439,932	-----
	TOTAL-----	449,942	-----
WATERWAY, MI	1411 LIMESTONE-----	2,638,166	-----
WATERWAY, MI	1411 LIMESTONE-----	6,544,465	-----
	1412 BUILDING STONE, UNWORKED-----	25,760	-----
	1442 SAND, GRAVEL, CRUSHED ROCK-----	61,419	-----
	2921 LIQUEFIED GASES-----	3,000	-----
	3241 BUILDING CEMENT-----	7,921	-----
	TOTAL-----	6,642,565	-----

# Waterborne Commerce of the United States. 1986

## BUFFALO, NY, DISTRICT

TOLEDO HARBOR, OHIO

SECTION INCLUDES: CHANNEL AT LAKE ERIE AND 7 MILES IN LOWER MAUMEE RIVER. CONTROLLING DEPTHS: 28 FEET IN THE RAY CHANNEL; 27 FEET IN THE RIVER CHANNEL TO THE TURNING BASIN, OPPOSITE THE MID-STATES TERMINALS, INC. DOCK; THENCE 14 FEET TO THE TURNING BASIN AT THE UPPER PROJECT LIMITS WITH 15 FEET IN THE TURNING BASIN; 20 FEET IN THE TURNING BASIN AT MILE 3 AND 27 FEET IN THE TURNING BASIN AT MILE 6.5. PROJECT DEPTHS: 24 FEET IN RAY AND 27 FEET IN THE RIVER CHANNEL TO THE TURNING BASIN OPPOSITE THE MID-STATES TERMINALS, INC. DOCK; THENCE 25 FEET TO THE TURNING BASIN AT UPSTREAM LIMITS OF THE PROJECT WITH 14 FEET IN THE TURNING BASIN; 20 FEET IN THE TURNING BASIN AT MILE 3 AND 27 FEET IN TURNING BASIN AT MILE 6.5. NAVIGATION SEASON: APPROXIMATELY MARCH 1 TO DECEMBER 31.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	23,275,707	-----	1982	16,394,148	17,700
1978	21,571,418	10,820	1983	17,408,794	19,680
1979	20,250,355	10,820	1984	20,836,636	197,282
1980	22,263,285	22,000	1985	18,400,468	210,562
1981	22,762,303	14,900	1986	17,818,554	238,058

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC		
		OVERSEAS		CANADIAN		LAKEWISE		LOCAL
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	
TOTAL	17,818,554	429,562	1,407,787	1,215,120	4,565,617	3,097,246	6,912,725	188,493
2103 CORN	769,550	-----	275,595	-----	543,555	-----	-----	-----
2104 OATS	6,618	-----	-----	8,818	-----	-----	-----	-----
2107 WHEAT	322,106	-----	165,404	-----	156,702	-----	-----	-----
2111 SOYBEANS	1,020,309	-----	833,679	-----	186,680	-----	-----	-----
1011 IRON ORE AND CONCENTRATES	3,378,553	24,343	-----	538,436	-----	2,774,401	37,373	-----
1051 ALUMINUM ORES, CONCENTRATES	23	-----	23	-----	-----	-----	-----	-----
1121 COAL AND LIGNITE	10,602,721	-----	145,259	-----	3,626,168	27,966	6,803,328	-----
1411 LIMESTONE	22,000	-----	-----	-----	-----	22,000	-----	-----
1442 SAND, GRAVEL, CRUSHED ROCK	198,505	-----	-----	-----	5,000	5,012	-----	188,493
1499 NONMETALLIC MINERALS, NEC	213,252	10,943	-----	34,171	-----	168,138	-----	-----
2042 ANIMAL FEEDS	13,760	-----	13,780	-----	-----	-----	-----	-----
2061 SUGAR	11,692	8,846	-----	2,756	-----	-----	-----	-----
2081 ALCOHOLIC BEVERAGES	205	205	-----	-----	-----	-----	-----	-----
2095 ICE	34	34	-----	-----	-----	-----	-----	-----
2211 BASIC TEXTILE PRODUCTS	897	892	5	-----	-----	-----	-----	-----
2421 LUMBER	51	-----	-----	-----	51	-----	-----	-----
2431 VENEER, PLYWOOD, WORKED WOOD	25	25	-----	-----	-----	-----	-----	-----
2621 STANDARD NEWSPRINT PAPER	7,014	-----	-----	7,014	-----	-----	-----	-----
2711 PRINTED MATTER	4	1	3	-----	-----	-----	-----	-----
2817 BENZENE AND TOLUENE	13,504	-----	-----	-----	13,504	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC	25	22	3	-----	-----	-----	-----	-----
2851 PAINTS	17,692	17,692	-----	-----	-----	-----	-----	-----
2871 NITROGENOUS CHEM FERTILIZERS	150,000	124,378	-----	25,622	-----	-----	-----	-----
2872 POTASSIC CHEM FERTILIZERS	559,240	-----	-----	559,240	-----	-----	-----	-----
2876 INSECTICIDES, DISINFECTANTS	54	-----	54	-----	-----	-----	-----	-----
2879 FERTILIZER AND MATERIALS, NEC	14,998	-----	-----	14,998	-----	-----	-----	-----
2891 MISCELLANEOUS CHEMICAL PROD	50	16	34	-----	-----	-----	-----	-----
2911 GASOLINE	12,074	-----	-----	12,074	-----	-----	-----	-----
2912 JET FUEL	8,673	-----	-----	-----	-----	-----	8,673	-----
2914 DISTILLATE FUEL OIL	4,157	-----	-----	-----	4,157	-----	-----	-----
2915 RESIDUAL FUEL OIL	63,351	-----	-----	-----	-----	-----	63,351	-----
2916 LUBRICATING OILS AND GREASES	29,400	-----	-----	-----	29,400	-----	-----	-----
2920 COKE, PETROLEUM COKE	9,894	-----	-----	-----	-----	9,894	-----	-----
2991 PETROLEUM AND COAL PROD, NEC	4	4	-----	-----	-----	-----	-----	-----
3011 RUBBER AND MISC PLASTIC PROD	211	211	-----	-----	-----	-----	-----	-----
3111 LEATHER AND LEATHER PRODUCTS	2	2	-----	-----	-----	-----	-----	-----
3211 GLASS AND GLASS PRODUCTS	26	26	-----	-----	-----	-----	-----	-----
3241 BUILDING CEMENT	89,835	-----	-----	-----	-----	89,835	-----	-----
3311 PIG IRON	11,992	-----	-----	11,992	-----	-----	-----	-----
3314 IRON AND STEEL PRIMARY FORMS	5,688	5,688	-----	-----	-----	-----	-----	-----
3315 IRON, STEEL SHAPES, EXC SHEET	136,632	136,632	-----	-----	-----	-----	-----	-----
3316 IRON AND STEEL PLATES, SHEETS	1	1	-----	-----	-----	-----	-----	-----
3317 IRON AND STEEL PIPE AND TUBE	1,627	1,627	-----	-----	-----	-----	-----	-----
3318 FERROALLOYS	81	81	-----	-----	-----	-----	-----	-----
3319 IRON AND STEEL PRODUCTS, NEC	1	1	-----	-----	-----	-----	-----	-----
3321 NONFERROUS METALS, NEC	2,196	2,196	-----	-----	-----	-----	-----	-----
3322 COPPER ALLOYS, UNWORKED	9	9	-----	-----	-----	-----	-----	-----
3323 LEAD AND ZINC, UNWORKED	83,625	83,625	-----	-----	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS	762	761	1	-----	-----	-----	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL	5,324	4,039	1,285	-----	-----	-----	-----	-----
3611 ELECTRICAL MACH AND EQUIP	41	36	5	-----	-----	-----	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP	187	137	50	-----	-----	-----	-----	-----
3731 SHIPS AND BOATS	22	22	-----	-----	-----	-----	-----	-----
3911 MISC MANUFACTURED PRODUCTS	9	9	-----	-----	-----	-----	-----	-----
4011 IRON AND STEEL SCRAP	24,655	-----	24,655	-----	-----	-----	-----	-----
4012 NONFERROUS METAL SCRAP	2,602	2,602	-----	-----	-----	-----	-----	-----
4112 COMMODITIES, NEC	459	454	2	3	-----	-----	-----	-----

# BUFFALO, NY, DISTRICT

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## SANDUSKY HARBOR, OHIO

SECTION INCLUDES: SOUTH-EASTERN PORTION OF SANDUSKY BAY, IN AND INCLUDING PASSENGER DOCKS ON CEDAR POINT, CONTROLLING DEPTHS: MOSELY CHANNEL, 27 FEET; BAY CHANNEL, 21 FEET; STRAIGHT CHANNEL FROM MOSELY CHANNEL TO JUNCTION WITH BAY CHANNEL, 25.5 FEET; TURNING BASIN, 24 FEET; DOCK CHANNEL, 21 FEET; STRAIGHT CHANNEL FROM DOCK CHANNEL TO JUNCTION WITH BAY CHANNEL, 21 FEET. PROJECT DEPTHS: MOSELY CHANNEL, 26 FEET; BAY CHANNEL AND STRAIGHT CHANNEL FROM MOSELY CHANNEL TO JUNCTION WITH BAY CHANNEL, 25 FEET; TURNING BASIN, 24 FEET; DOCK CHANNEL, 22 FEET; AND STRAIGHT CHANNEL FROM DOCK CHANNEL TO JUNCTION WITH BAY CHANNEL, 21 FEET.

### COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	4,314,377	186,301	1982-----	5,065,353	114,634
1978-----	3,655,746	170,992	1983-----	4,344,281	224,337
1979-----	3,972,652	173,153	1984-----	4,789,730	246,744
1980-----	6,412,386	163,541	1985-----	4,565,990	258,831
1981-----	3,744,310	122,835	1986-----	4,134,889	203,931

### FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN	LAKEWISE	
		EXPORTS	EXPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	4,134,889	741	2,827,811	290,350	1,015,987
0131 FRESH FRUITS-----	304	-----	-----	304	-----
0191 MISCELLANEOUS FARM PRODUCTS-----	23	-----	-----	-----	23
1121 COAL AND LIGNITE-----	3,789,868	741	2,827,811	1,083	960,233
1411 LIMESTONE-----	25,595	-----	-----	25,595	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	71,312	-----	-----	59,864	11,448
1494 GYPSUM, CRUDE AND PLASTERS-----	162,287	-----	-----	162,287	-----
1499 NONMETALLIC MINERALS, NEC-----	40,866	-----	-----	40,866	-----
2031 FISH AND SHELLFISH, PREPARED-----	39,360	-----	-----	-----	39,360
2042 ANIMAL FEEDS-----	37	-----	-----	-----	37
2094 GROCERIES-----	284	-----	-----	-----	284
2095 ICE-----	69	-----	-----	-----	69
2099 MISCELLANEOUS FOOD PRODUCTS-----	257	-----	-----	-----	257
2413 FUEL WOOD, CHARCOAL, WASTES-----	3	-----	-----	3	-----
2511 FURNITURE AND FIXTURES-----	26	-----	-----	-----	26
2872 POTASSIC CHEM FERTILIZERS-----	50	-----	-----	-----	50
2911 GASOLINE-----	526	-----	-----	-----	526
2914 DISTILLATE FUEL OIL-----	488	-----	-----	-----	488
2918 ASPHALT, TAR, AND BITUMENS-----	909	-----	-----	-----	909
2921 LIQUEFIED GASES-----	54	-----	-----	-----	54
3241 BUILDING CEMENT-----	5	-----	-----	-----	5
3511 MACHINERY, EXCEPT ELECTRICAL-----	810	-----	-----	273	537
4029 WASTE AND SCRAP, NEC-----	61	-----	-----	61	-----
4112 COMMODITIES, NEC-----	1,695	-----	-----	14	1,681

## HURON HARBOR, OHIO

SECTION INCLUDES: LAKE APPROACH CHANNEL FROM DEEP WATER TO A POINT OPPOSITE THE OUTER END OF EAST BREAKWATER; ENTRANCE CHANNEL FROM ITS JUNCTION WITH THE APPROACH CHANNEL TO ITS JUNCTION WITH THE RIVER CHANNEL; RIVER CHANNEL AND TURNING BASIN TO WITHIN 1,500 FEET OF THE PENN CENTRAL RAILROAD BRIDGE. CONTROLLING DEPTHS: LAKE APPROACH AND ENTRANCE CHANNEL, 27.5 FEET; RIVER CHANNEL, 27 FEET; TURNING BASIN, 21 FEET. PROJECT DEPTHS: LAKE APPROACH AND ENTRANCE CHANNELS, 29 FEET; RIVER CHANNEL TO SLIP NO. 1, 28 FEET; FROM SLIP NO. 1 THROUGH EASTERN PORTION OF THE TURNING BASIN, 27 FEET; TURNING BASIN, 21 FEET.

### COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	1,933,192	1982-----	1,893,109
1978-----	2,429,342	1983-----	1,954,308
1979-----	3,457,764	1984-----	2,509,263
1980-----	2,124,061	1985-----	1,950,106
1981-----	2,380,447	1986-----	262,720

\* PASSENGERS=114.

### FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN	LAKEWISE	
		EXPORTS	IMPORTS	EXPORTS	RECEIPTS
TOTAL-----	262,720	42,624	24,379	6,183	189,534
0103 CORNS-----	6,183	-----	-----	6,183	-----
0111 SOYBEANS-----	42,624	42,624	-----	-----	-----
1011 IRON ORE AND CONCENTRATES-----	24,379	-----	24,379	-----	-----
1411 LIMESTONE-----	189,534	-----	-----	-----	189,534

## Waterborne Commerce of the United States, 1986

## LORAIN HARBOR, OHIO

SECTION INCLUDED: OUTER HARBOR AND BLACK RIVER FROM MOUTH TO AND INCLUDING UNITED STATES STEEL CORP., NATIONAL TUBE DIVISION DOCK, 3 MILES. CONTROLLING DEPTHS: LAKE APPROACH CHANNEL, 27.0 FEET; A CHANNEL 800 FEET WIDE THROUGH THE OUTER HARBOR, 27.0 FEET; REMAINDER OF OUTER HARBOR, 25 FEET; LOWER 2,200 FEET OF RIVER CHANNEL, 25 FEET; REMAINDER OF RIVER CHANNEL 24 FEET EXCEPT TURNING BASIN JUST DOWNSTREAM OF THE 21ST STREET BRIDGE WHICH IS 12 TO 19 FEET AND THE TURNING BASIN OPPOSITE THE U. S. STEEL CORP., NATIONAL TUBE DIVISION WHICH IS 12 TO 20 FEET. PROJECT DEPTHS: LAKE APPROACH CHANNEL, 24 FEET; A CHANNEL 800 FEET WIDE THROUGH THE OUTER HARBOR, 28 FEET; REMAINDER OF OUTER HARBOR, 25 FEET; LOWER 2,200 FEET OF RIVER CHANNEL, 24 FEET; REMAINDER OF RIVER CHANNEL, 27 FEET; EXCEPT TURNING BASIN DOWNSTREAM OF 21ST STREET BRIDGE, 20 FEET AND TURNING BASIN OPPOSITE U. S. STEEL CORP., NATIONAL TUBE DIVISION DOCK, 21 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	6,286,413	1987-----	5,672,469
1978-----	6,230,254	1983-----	7,229,537
1979-----	4,833,011	1984-----	9,884,246
1980-----	6,151,366	1985-----	9,426,024
1981-----	13,714,545	1986-----	11,426,688

## FREIGHT TRAFFIC, 1986

## (SHORT TONS)

COMMODITY	TOTAL	FOREIGN			DOMESTIC		LOCAL
		OVERSEAS	CANADIAN		LAKEWISE		
			IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS	
TOTAL-----	11,426,688	87,555	86,954	30,046	6,701,849	4,506,790	14,364
1011 IRON ORE AND CONCENTRATES-----	10,880,431	87,555	28,791	-----	6,364,080	4,400,003	-----
1121 COAL AND LIGNITE-----	42,176	-----	-----	30,046	12,130	-----	-----
1411 LIMESTONE-----	139,104	-----	-----	-----	138,109	-----	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	93,100	-----	-----	-----	-----	76,736	14,364
1494 GYPSUM, CRUDE AND PLASTERS-----	167,530	-----	-----	-----	167,530	-----	-----
2872 POTASSIC CHEM FERTILIZERS-----	57,291	-----	57,291	-----	-----	-----	-----
3312 SLAG-----	28,051	-----	-----	-----	-----	28,051	-----

## CLEVELAND HARBOR, OHIO

SECTION INCLUDED: OUTER HARBOR, OLD RIVER AND CUYAHOGA RIVER FROM MOUTH TO AND INCLUDING UPPER REPUBLIC STEEL CORP. DOCK, IMMEDIATELY DOWNSTREAM FROM NORFOLK & WESTERN RAILWAY BRIDGE, 5.8 MILES. CONTROLLING DEPTHS: LAKE APPROACH CHANNEL, 30 FEET; ENTRANCE CHANNEL, WEST BASIN AND WESTERLY 800 FEET OF EAST BASIN, 28 FEET; EASTERLY 3800-FOOT LENGTH OF EAST BASIN, 27 FEET; 500-FOOT CHANNEL THROUGH EAST OUTER HARBOR, 26 FEET; CHANNEL BETWEEN PIERS TO CORRAIL RAILROAD BRIDGE, 27.5 FEET; CHANNEL IN CUYAHOGA RIVER FROM PENN. CENTRAL RAILROAD TO UPPER PROJECT LIMIT, 22 FEET; TURNING BASIN UPSTREAM FROM E.I. DUPONT DE NEMOURS AND COMPANY, INC., GRASSLETT CHEMICAL DIVISION DOCK, 19.5 FEET; OLD RIVER TO SAND PRODUCTS CORPORATION DOCK, 23 FEET; REMAINDER OF OLD RIVER TO UPPER PROJECT LIMIT, 14 FEET. PROJECT DEPTHS: LAKE APPROACH CHANNEL, 29 FEET; WEST BASIN, ENTRANCE CHANNEL AND WEST END OF EAST BASIN, 28 FEET; REMAINING 3800-FOOT LENGTH OF EAST BASIN, 27 FEET; 500-FOOT CHANNEL THROUGH EAST OUTER HARBOR, 25 FEET; LOWER CUYAHOGA RIVER FROM LAKEWARD ENDS OF THE PIERS TO IMMEDIATELY ABOVE JUNCTION WITH OLD RIVER, 27 FEET; OLD RIVER TO UPPER PROJECT LIMIT, 27 FEET; REMAINDER OF CUYAHOGA RIVER, 23 FEET; TURNING BASIN UPSTREAM FROM E.I. DUPONT DE NEMOURS & CO., GRASSLETT CHEMICAL DIVISION DOCK, 19 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977-----	16,103,781	78,721	1987-----	8,941,232	184,000
1978-----	19,658,862	127,870	1983-----	11,359,960	165,600
1979-----	19,470,349	120,400	1984-----	12,920,708	160,000
1980-----	14,045,151	-----	1985-----	13,767,174	190,000
1981-----	13,903,840	27,200	1986-----	12,189,278	200,000

## FREIGHT TRAFFIC, 1986

## (SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC	
		OVERSEAS		CANADIAN		LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	12,188,278	582,689	67,917	1,802,999	487,292	8,604,249	643,132
0107 WHEAT-----	58,272	-----	5,512	-----	-----	52,760	-----
2841 CRUDE RUBBER AND ALLIED GUMS-----	22	22	-----	-----	-----	-----	-----
0911 FRESH FISH, EXCEPT SHELLFISH-----	339	-----	-----	-----	339	-----	-----
1011 IRON ORE AND CONCENTRATES-----	7,036,965	-----	-----	890,594	-----	6,146,371	-----
1051 ALUMINUM ORES, CONCENTRATES-----	2,471	2,471	-----	-----	-----	-----	-----
1311 CRUDE PETROLEUM-----	4,997	-----	-----	8,997	-----	-----	-----
1411 LIMESTONE-----	1,789,433	-----	-----	-----	-----	1,789,433	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	434,379	-----	-----	763,226	-----	71,155	-----
1494 GYPSUM, CRUDE AND PLASTERS-----	35,964	-----	-----	-----	35,964	-----	-----
1499 NONMETALLIC MINERALS, NEC-----	984,906	7,293	-----	-----	377,437	-----	600,176
2011 MEAT, FRESH, CHILLED, FROZEN-----	122	122	-----	-----	-----	-----	-----
2014 TALLOW, ANIMAL FATS AND OILS-----	786	-----	786	-----	-----	-----	-----
2039 PREP FRUIT AND VEG JUICE, NEC-----	45	45	-----	-----	-----	-----	-----
2049 GRAIN MILL PRODUCTS, NEC-----	42	42	-----	-----	-----	-----	-----
2081 ALCOHOLIC BEVERAGES-----	929	929	-----	-----	-----	-----	-----
2099 MISCELLANEOUS FOOD PRODUCTS-----	25	25	-----	-----	-----	-----	-----
2211 BASIC TEXTILE PRODUCTS-----	54	54	-----	-----	-----	-----	-----
2311 APPAREL-----	19	19	-----	-----	-----	-----	-----
2421 LUMBER-----	20	20	-----	-----	-----	-----	-----
2511 FURNITURE AND FIXTURES-----	22	22	-----	-----	-----	-----	-----
2631 PAPER AND PAPERBOARD-----	123	123	-----	-----	-----	-----	-----
2711 PRINTED MATTER-----	4	4	-----	-----	-----	-----	-----
2819 BASIC CHEMICALS AND PROD, NEC-----	356	356	-----	-----	-----	-----	-----

# BUFFALO, NY, DISTRICT

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CLEVELAND HARBOR, OHIO--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC	
		OVERSEAS		CANADIAN		LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	EXPORTS	RECEIPTS	SHIPMENTS
2821 PLASTIC MATERIALS-----	111	111	-----	-----	-----	-----	-----
2841 SOAP-----	5	5	-----	-----	-----	-----	-----
2851 PAINTS-----	6,946	89	-----	6,857	-----	-----	-----
2872 POTASSIUM CHEM FERTILIZERS-----	22,000	-----	-----	22,000	-----	-----	-----
2879 FERTILIZER AND MATERIALS, NEC-----	364	364	-----	-----	-----	-----	-----
2891 MISCELLANEOUS CHEMICAL PROD-----	234	6	228	-----	-----	-----	-----
2911 GASOLINE-----	23,674	-----	-----	23,674	-----	-----	-----
2914 DISTILLATE FUEL OIL-----	18,255	-----	-----	18,255	-----	-----	-----
2915 RESIDUAL FUEL OIL-----	67,039	-----	-----	17,126	-----	69,913	-----
2917 NAPHTHA, PETROLEUM SOLVENTS-----	4,764	-----	-----	4,764	-----	-----	-----
2918 ASPHALT, TAR, AND BITUMENS-----	111,180	-----	-----	5,354	-----	105,826	-----
2920 CRUDE, PETROLEUM CRUDE-----	73,552	-----	-----	73,552	-----	-----	-----
3011 RUBBER AND MISC PLASTIC PROD-----	100	100	-----	-----	-----	-----	-----
3111 LEATHER AND LEATHER PRODUCTS-----	5	5	-----	-----	-----	-----	-----
3211 GLASS AND GLASS PRODUCTS-----	119	119	-----	-----	-----	-----	-----
3241 BUILDING CEMENT-----	401,389	-----	-----	29,511	-----	368,793	3,285
3251 STRUCTURAL CLAY PRODUCTS-----	274	279	-----	-----	-----	-----	-----
3281 CUT STONE AND STONE PRODUCTS-----	4	4	-----	-----	-----	-----	-----
3291 MISC NONMETALLIC MINERAL PROD-----	107	107	-----	-----	-----	-----	-----
3312 SLAG-----	39,671	-----	-----	-----	-----	-----	39,671
3314 IRON AND STEEL PRIMARY FORMS-----	156,558	156,558	-----	-----	-----	-----	-----
3315 IRON, STEEL SHAPES, EXC SHEET-----	356,357	356,237	-----	120	-----	-----	-----
3316 IRON AND STEEL PLATES, SHEETS-----	2,743	900	1,843	-----	-----	-----	-----
3317 IRON AND STEEL PIPE AND TUBE-----	3,311	3,311	-----	-----	-----	-----	-----
3318 FERROALLOY-----	21,576	11,255	-----	10,321	-----	-----	-----
3319 IRON AND STEEL PRODUCTS, NEC-----	4,621	774	7,847	-----	-----	-----	-----
3321 NONFERROUS METALS, NEC-----	6	6	-----	-----	-----	-----	-----
3322 COPPER ALLOYS, UNWORKED-----	67	67	-----	-----	-----	-----	-----
3323 LEAD AND ZINC, UNWORKED-----	2,662	2,662	-----	-----	-----	-----	-----
3324 ALUMINUM AND ALLOYS, UNWORKED-----	1,030	1,030	-----	-----	-----	-----	-----
3411 FABRICATED METAL PRODUCTS-----	1,401	-----	-----	-----	-----	-----	-----
3511 MACHINERY, EXCEPT ELECTRICAL-----	37,141	35,070	2,071	-----	-----	-----	-----
3611 ELECTRICAL MACH AND EQUIP-----	95	89	6	-----	-----	-----	-----
3711 MOTOR VEHICLES, PARTS, EQUIP-----	1,435	271	1,164	-----	-----	-----	-----
3731 SHIPS AND BOATS-----	23	23	-----	-----	-----	-----	-----
3811 PHOTO, FILM, PHOTO, OPT GOODS-----	16	16	-----	-----	-----	-----	-----
3911 MISC MANUFACTURED PRODUCTS-----	60	60	-----	-----	-----	-----	-----
4011 IRON AND STEEL SHAPES-----	48,045	-----	48,045	-----	-----	-----	-----
4012 NONFERROUS METAL SHAPES-----	570	177	393	-----	-----	-----	-----
4112 COMMODITIES, NEC-----	61	41	20	-----	-----	-----	-----

## FAIRPORT HARBOR, OHIO

SECTION INCLUDES: OUTER HARBOR AND GRAND RIVER FROM MOUTH TO AND INCLUDING DIAMOND ALKALI COMPANY STONE DOCK, 1.5 MILES. CONTROLLING DEPTHS: ENTRANCE CHANNEL, 24 FEET; OUTER HARBOR, 24.6 FEET; GRAND RIVER TO UPSTREAM OF REPUBLIC STEEL, 19.0 FEET; REMAINING LENGTH OF GRAND RIVER TO THE UPPER PROJECT LIMIT, 19 FEET; EXCEPT FOR 1,000 FEET OF THE UPSTREAM END OF THE WEST SIDE OF THE CHANNEL, 5 FEET; TURNING BASIN, 15 FEET. MAINTENANCE DEPTHS: ENTRANCE CHANNEL AND OUTER HARBOR, 25 FEET; GRAND RIVER TO UPSTREAM OF REPUBLIC STEEL, 20 FEET; REMAINING LENGTH OF GRAND RIVER TO THE UPPER PROJECT LIMITS, 21 FEET; TURNING BASIN, 18 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	2,194,262	1982-----	1,626,977
1978-----	2,590,469	1983-----	1,709,584
1979-----	2,391,800	1984-----	1,995,097
1980-----	1,906,627	1985-----	2,317,777
1981-----	1,674,166	1986-----	2,492,551

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN			DOMESTIC		LOCAL
		OVERSEAS	CANADIAN		LAKEWISE		
			EXPORTS	IMPORTS	EXPORTS	SHIPMENTS	
TOTAL-----	2,492,551	40,298	43,402	335,011	1,616,622	378,291	78,927
1411 LIMESTONE-----	1,616,622	-----	-----	-----	1,616,622	-----	-----
1442 SAND, GRAVEL, OR SIMILAR MISC-----	122,329	-----	43,402	-----	-----	-----	78,927
1499 NONMETALLIC MINERALS, NEC-----	753,600	40,298	-----	335,011	-----	378,291	-----

## Waterborne Commerce of the United States, 1986

## ASHTABULA HARBOR, OHIO

SECTION INCLUDED: OUTER HARBOR AND ASHTABULA RIVER FROM MOUTH TO AND INCLUDING CITY OF ASHTABULA DOCK (FORMER GREAT LAKES ENGINEERING WORKS DOCK), 1.75 MILES. CONTROLLING DEPTH: WESTERN PORTION OF OUTER HARBOR TO INNER BREAKWATER & APPROACH CHANNEL TO DOCKS EAST OF INNER BREAKWATER, 20.5 FEET TURNING BASIN IN FRONT OF INNER BREAKWATER 21.5 FEET; THE APPROACH TO THE PENN. CENTRAL RAILROAD COMPANY'S SLIP AND THE LOWER 2,000 FEET OF THE ASHTABULA RIVER, 23 FEET; THENCE TO C&N FERRY SLIP, 10 FEET; THENCE TO A POINT 1,550 FEET UPSTREAM FROM TURNING BASIN AND INCLUDING TURNING BASIN, 3 FEET. PROJECT DEPTHS: ENTRANCE CHANNEL, 29 FEET; WESTERN PORTION OF OUTER HARBOR TO INNER BREAKWATER, 20 FEET; APPROACH CHANNEL TO DOCKS EAST OF INNER BREAKWATER, 20 FEET; TURNING BASIN IN THE EASTERN PORTION OF THE OUTER HARBOR, 22 FEET; CHANNEL FROM INSIDE THE INNER BREAKWATER TO MOUTH OF RIVER AND 2,000 FEET UPSTREAM AND APPROACH CHANNEL TO PENN. CENTRAL RAILROAD SLIP, 27 FEET; THENCE TO C&N FERRY SLIP, 10 FEET; THENCE TO A POINT 1,550 FEET UPSTREAM FROM TURNING BASIN AND INCLUDING TURNING BASIN, 10 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	11,632,975	1982	6,952,337
1978	12,830,251	1983	8,345,923
1979	14,602,015	1984	9,243,475
1980	10,074,956	1985	7,039,128
1981	7,947,755	1986	7,153,593

## FREIGHT TRAFFIC, 1986

## (SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC LAKEWISE	
		OVERSEAS		CANADIAN		RECEIPTS	SHIPMENTS
		IMPORTS	EXPORTS	IMPORTS	EXPORTS		
TOTAL	7,165,593	212,467	13,668	332,138	2,616,401	2,901,145	1,087,774
1011 IRON ORE AND CONCENTRATES	2,775,334	82,018		145,675		2,549,641	
1091 NONFERROUS ORES, CONCENT., FCO	70,227	70,227					
1121 COAL AND LIGNITE	3,684,637				2,596,863		1,087,774
1411 LIMESTONE	346,037					346,037	
1422 SAND, GRAVEL, CRUSHED ROCK	42,564			42,564			
1451 CLAY	6,945						
1499 NONMETALLIC MINERALS, NEC	19,538				19,538		
2872 POTASSIC CHEM FERTILIZERS	140,471			135,404		5,467	
3311 PIG IRON	10,495			10,495			
3315 IRON, STEEL SHAPES, EXC SHEET	4,822						
3318 FERROALLOYS	671						
4011 IRON AND STEEL SCRAP	13,658		13,668				
4012 NONFERROUS METAL SCRAP	47,784	47,784					

## CONNEAUT HARBOR, OHIO

SECTION INCLUDED: OUTER HARBOR AND CONNEAUT RIVER 2,450 FEET UPSTREAM OF THE OUTER END OF THE WEST PIER. CONTROLLING DEPTH: WESTERN PORTION OF OUTER HARBOR, 20.5 FEET; ACCESS CHANNEL TO CITY DOCK, 7.5 FEET; EASTERN PORTION OF OUTER HARBOR 23 FEET. INNER HARBOR, 20.5 FEET; PROJECT DEPTHS: EASTERN PORTION OF OUTER HARBOR, 28 FEET; WESTERN PORTION OF OUTER HARBOR, 22 FEET; ACCESS CHANNEL TO CITY DOCK, 4 FEET; INNER HARBOR, 27 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	15,146,627	1982	10,968,273
1978	17,427,794	1983	8,771,290
1979	21,478,061	1984	12,660,783
1980	18,654,029	1985	9,148,003
1981	16,150,563	1986	7,675,248

## FREIGHT TRAFFIC, 1986

## (SHORT TONS)

COMMODITY	TOTAL	FOREIGN				DOMESTIC LAKEWISE	
		OVERSEAS		CANADIAN		RECEIPTS	SHIPMENTS
		EXPORTS	IMPORTS	EXPORTS	IMPORTS		
TOTAL	7,675,248	247,211	27,693	4,816,748	1,194,539	1,389,007	
1011 IRON ORE AND CONCENTRATES	821,572		27,693		795,879		
1121 COAL AND LIGNITE	6,418,349	247,211		4,767,598		1,383,540	
1411 LIMESTONE	400,660				400,660		
1499 NONMETALLIC MINERALS, NEC	29,200				29,200		
2872 POTASSIC CHEM FERTILIZERS	5,467					5,467	

# BUFFALO, NY, DISTRICT

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ERIE HARBOR, PA.

SECTION INCLUDES: SOUTHERLY SIDE OF ERIE HARBOR AT LAKE ERIE WATER FRONTAGE FROM HARBOR ENTRANCE EASTWARD TO AND INCLUDING SUN OIL CO. DOCK, 3.5 MILES. CONTROLLING DEPTHS: ENTRANCE CHANNEL, 24 FEET; CHANNEL TO EASTERN COAL AND ORE DOCKS, 27 FEET; AND 27 FEET TO THE PORT AUTHORITY DOCK; HARBOR BASIN, 21 FEET; WESTERLY PORTION OF HARBOR, 18 FEET. PROJECT DEPTHS: ENTRANCE CHANNEL, 24 FEET; APPROACH CHANNEL TO EASTERN COAL AND ORE DOCKS, 24 FEET; APPROACH TO PORT AUTHORITY DOCKS, 27 FEET; HARBOR BASIN, 21 FEET; WESTERLY PORTION OF HARBOR BASIN, 18 FEET. THE APPROACH CHANNEL FROM THE 24 FEET CHANNEL TO AND INCLUDING HARBOR BASIN AT WESTERN DOCK HAS BEEN AUTHORIZED, BUT NEVER COMPLETED AND CONSIDERED INACTIVE AT THE PRESENT TIME.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	954,072	-----	1982	624,432	14,698
1978	1,179,985	67,200	1983	606,690	-----
1979	433,707	27,360	1984	828,904	19,940
1980	505,075	24,080	1985	905,504	26,988
1981	754,590	23,423	1986	434,141	12,600

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN OVERSEAS		CANADIAN		DOMESTIC LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	RECEIPTS	LOCAL	
TOTAL	634,141	43,478	77,097	137,620	403,669	172,277	
1411 LIME	352,160	-----	-----	-----	352,160	-----	
1442 SAND, GRAVEL, CRUSHED ROCK	297,035	-----	-----	124,196	560	172,277	
1499 NONMETALLIC MINERALS, NEC	50,949	-----	-----	-----	50,949	-----	
2042 FALCON, ANIMAL FATS AND OILS	20	-----	20	-----	-----	-----	
2421 APPAREL	1,102	-----	1,102	-----	-----	-----	
2491 WOOD MANUFACTURES, NEC	14	-----	14	-----	-----	-----	
2812 BASIC CHEMICALS AND MIXTURES	15	-----	15	-----	-----	-----	
2851 PAINTS	1	-----	1	-----	-----	-----	
3311 PIG IRON	2,756	-----	-----	2,756	-----	-----	
3314 IRON AND STEEL PRIMARY FORMS	24,790	24,790	-----	-----	-----	-----	
3315 IRON, STEEL SHEETS, AND SHEET	17,843	12,302	5,481	-----	-----	-----	
3316 IRON AND STEEL PLATES, SHEETS	7,950	-----	7,950	-----	-----	-----	
3318 FERRALLOY	15,521	6,301	-----	9,220	-----	-----	
3321 NONFERROUS METALS, NEC	20	20	-----	-----	-----	-----	
3411 FABRICATED METAL PRODUCTS	74	-----	74	-----	-----	-----	
3511 ALKALI, ALKALINE EARTH, CHEMICAL	246	5	241	-----	-----	-----	
3611 ELECTRICAL MACH AND EQUIP	406	-----	406	-----	-----	-----	
3711 MOTOR VEHICLES, PARTS, EQUIP	199	-----	199	-----	-----	-----	
3731 SHIPS AND BOATS	4	-----	-----	4	-----	-----	
4011 IRON AND STEEL SCRAP	58,014	-----	58,014	-----	-----	-----	
4122 COMMODITIES, NEC	1,442	-----	-----	1,442	-----	-----	
4999 DEPARTMENT OF DEFENSE AND SPACE	3,577	-----	3,577	-----	-----	-----	

## BUFFALO HARBOR, N. Y. (INCLUDED IN PORT OF BUFFALO)

SECTION INCLUDES: OUTER HARBOR, BLACKWATER CANAL, UNION CANAL. BUFFALO RIVER FROM MOUTH TO CONRAIL N. Y. BRIDGE, 5.5 MILES. BUFFALO SHIP CANAL, AND BLACK ROCK LOCK CANAL TO THE BLACK ROCK LOCK. CONTROLLING DEPTHS: OUTER AREA OF SOUTH ENTRANCE CHANNEL, 30 FEET; SOUTH ENTRANCE CHANNEL, 24 FEET; SOUTHERN PORTION OF OUTER HARBOR, 28 FEET; 900 FEET WIDE SECTION ADJACENT TO THE SOUTH BREAKWATER BEGINNING 2,000 FEET NORTH OF THE SOUTH BREAKWATER AND PROCEEDING NORTHERLY 4,200 FEET, 23 FEET; THENCE 27 FEET TO THE INTERNATIONAL SALT COMPANY AND 23 FEET IN THE REMAINDER OF THE OUTER HARBOR TO THE MOUTH. NEW YORK ENTRANCE CHANNEL, 25 FEET; BLACK ROCK CANAL, 21 FEET; BUFFALO RIVER ENTRANCE, BUFFALO RIVER AND BUFFALO SHIP CANAL, 22 FEET. PROJECT DEPTHS: OUTER AREA OF SOUTH ENTRANCE CHANNEL, 30 FEET; SOUTH ENTRANCE CHANNEL, 27 FEET; SOUTHERN PORTION OF OUTER HARBOR, 28 FEET; 900 FEET WIDE SECTION ADJACENT TO THE SOUTH BREAKWATER BEGINNING 2,000 FEET NORTH OF THE SOUTH BREAKWATER AND PROCEEDING NORTHERLY 4,200 FEET, 23 FEET. MIDDLE SECTION OF THE OUTER HARBOR, 27 FEET; NORTH OUTER HARBOR, 23 FEET; NORTH ENTRANCE CHANNEL, 25 FEET; BUFFALO RIVER ENTRANCE, BUFFALO RIVER AND BUFFALO SHIP CANAL, 22 FEET. BLACK ROCK CANAL, 21 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	7,975,244	-----	1982	3,551,960	-----
1978	9,134,753	-----	1983	1,963,434	-----
1979	8,315,680	-----	1984	1,490,354	-----
1980	5,470,309	-----	1985	1,399,804	-----
1981	5,780,021	-----	1986	1,464,460	-----

## FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN OVERSEAS		CANADIAN		DOMESTIC LAKEWISE	
		IMPORTS	EXPORTS	IMPORTS	RECEIPTS		
TOTAL	1,464,460	8,296	91,682	169,375	1,195,107		
2107 WHEAT	812,020	-----	-----	107,366	704,654		
1411 LIME	131,846	-----	-----	-----	131,846		
1442 SAND, GRAVEL, CRUSHED ROCK	37,403	-----	-----	-----	37,403		
1499 NONMETALLIC MINERALS, NEC	108,992	-----	-----	-----	108,992		
2014 FALCON, ANIMAL FATS AND OILS	554	-----	554	-----	-----		
2039 PREP FRUIT AND VEG JUICE, NEC	37	-----	37	-----	-----		
2081 ALCOHOLIC BEVERAGES	22	-----	22	-----	-----		
2311 APPAREL	21	-----	21	-----	-----		
2491 WOOD MANUFACTURES, NEC	3	-----	-----	-----	3		

## Waterborne Commerce of the United States, 1986

BUFFALO HARBOR, N. Y. (INCLUDED IN PORT OF BUFFALO)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS		CANADIAN	LAKEWISE
		IMPORTS	EXPORTS	IMPORTS	RECEIPTS
2819 BASIC CHEMICALS AND PROD, NEC	2		2		
2821 PLASTIC MATERIALS	2		2		
2844 SOAP	99			79	
2872 POTASSIC CHEM FERTILIZERS	15,549			15,549	
2911 GASOLINE	68,974			19,111	49,867
2914 DISTILLATE FUEL OIL	29,517			9,266	20,051
2915 RESIDUAL FUEL OIL	17,063			17,063	
3011 RUBBER AND MISC PLASTIC PROD	6			6	
3241 BUILDING CEMENT	142,294				142,294
3315 IRON, STEEL SHAPES, EXC SHEET	8,124	8,124			
3319 IRON AND STEEL PRODUCTS, NEC	20	20			
3411 FABRICATED METAL PRODUCTS	1	1			
3511 MACHINERY, EXCEPT ELECTRICAL	10	6	3	1	
3611 ELECTRICAL MACH AND EQUIP	1,022	10	1,001	11	
3711 MOTOR VEHICLES, PARTS, EQUIP	55	55			
4011 IRON AND STEEL SCRAP	90,120		90,120		

PORT OF BUFFALO, N. Y.

SECTION INCLUDED: JUITER HARBOR, LACKAWANNA CANAL, UNION CANAL, BUFFALO RIVER FROM MOUTH TO CONRAIL RY BRIDGE 5.5 MILES, BUFFALO SHIP CANAL, BLACK ROCK CANAL, BLACK ROCK LOCK, BLACK ROCK CHANNEL, NIAGARA RIVER, AND TONAWANDA TO AND INCLUDING BUFFALO OIL TERMINAL, INC. DOCK, LOCATED ABOUT 2,000 FEET NORTH OF TURNING BASIN, TONAWANDA RIVER HARBOR, AND TONAWANDA CREEK CHANNEL FROM MOUTH TO MAIN STREET BRIDGE. CONTROLLING AND PROJECT DEPTHS: SEE BUFFALO HARBOR, NIAGARA RIVER AND TONAWANDA.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	PASSENGERS	YEAR	TONS	PASSENGERS
1977	8,696,209		1982	3,968,173	
1978	9,941,560		1983	2,288,076	
1979	8,840,496		1984	1,854,266	
1980	5,986,470		1985	1,779,481	
1981	6,141,150		1986	1,628,169	

FREIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS		CANADIAN	LAKEWISE
		IMPORTS	EXPORTS	IMPORTS	RECEIPTS SHIPMENTS
TOTAL	1,628,169	8,316	91,682	217,959	1,304,911 5,301
0107 WHEAT	825,412			121,758	704,654
1011 LIMESTONE	131,846				131,846
1442 SAND, GRAVEL, CRUSHED ROCK	37,403				37,403
1499 NONMETALLIC MINERALS, NEC	108,992				108,992
2014 TALLOW, ANIMAL FATS AND OILS	554		554		
2039 PREP FRUIT AND VEG JUICE, NEC	37	37			
2081 ALCOHOLIC BEVERAGES	22	22			
2311 APPAREL	21	21			
2491 FOOD MANUFACTURES, NEC	3			3	
2819 BASIC CHEMICALS AND PROD, NEC	2		2		
2821 PLASTIC MATERIALS	2		2		
2844 SOAP	99			49	
2872 POTASSIC CHEM FERTILIZERS	15,549			15,549	
2911 GASOLINE	73,052			23,165	49,867
2914 DISTILLATE FUEL OIL	45,303			25,252	20,051
2915 RESIDUAL FUEL OIL	39,945			32,045	2,549 5,301
2918 ASPHALT, TAR, AND BITUMENS	107,255				107,255
3011 RUBBER AND MISC PLASTIC PROD	6			6	
3241 BUILDING CEMENT	142,294				142,294
3315 IRON, STEEL SHAPES, EXC SHEET	8,124	8,124			
3319 IRON AND STEEL PRODUCTS, NEC	20	20			
3411 FABRICATED METAL PRODUCTS	1	1			
3511 MACHINERY, EXCEPT ELECTRICAL	30	26	3	1	
3611 ELECTRICAL MACH AND EQUIP	1,022	10	1,001	11	
3711 MOTOR VEHICLES, PARTS, EQUIP	55	55			
4011 IRON AND STEEL SCRAP	90,120		90,120		

OSWEGO HARBOR, N. Y.

SECTION INCLUDED: JUITER HARBOR AND OSWEGO RIVER FROM MOUTH TO SEVICA STREET. CONTROLLING DEPTHS: LAKE APPROACH CHANNEL, 27 FEET; CHANNEL THROUGH OUTER HARBOR, 24 FEET; EAST AND WEST SIDE OF JUITER HARBOR, 21 FEET; OSWEGO RIVER CHANNEL, 26 FEET. PROJECT DEPTHS: LAKE APPROACH CHANNEL, 27 FEET; CHANNEL THROUGH OUTER HARBOR, 25 FEET; LOWER 1,600 FEET OF OSWEGO RIVER CHANNEL, 24 FEET; REMAINDER OF OSWEGO RIVER CHANNEL AND OSWEGO HARBOR, 21 FEET.

COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977	1,346,112	1982	542,128
1978	1,215,979	1983	354,858
1979	1,495,967	1984	473,657
1980	860,144	1985	525,076
1981	1,039,707	1986	482,648

# BUFFALO, NY, DISTRICT

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OSWEGO HARBOR, N. Y.--CONTINUED

FLIGHT TRAFFIC, 1986

(SHORT TONS)

COMMODITY	TOTAL	FOREIGN		DOMESTIC	
		OVERSEAS	CANADIAN	LAKELINE	INTERNAL
		IMPORTS	IMPORTS	RECEIPTS	SHIPMENTS
TOTAL-----	482,648	27,198	375,385	14,899	65,166
1499 NONMETALLIC MINERALS, NEC-----	14,899	-----	-----	14,899	-----
2211 BASIC TEXTILE PRODUCTS-----	1,738	1,738	-----	-----	-----
2311 APPAREL-----	2	2	-----	-----	-----
2872 POTASSIC CHEM FERTILIZERS-----	22,108	-----	22,108	-----	-----
2915 RESIDUAL FUEL OIL-----	91,357	25,452	65,905	-----	-----
3241 BUILDING CEMENT-----	352,538	-----	287,372	-----	65,166
3411 FABRICATED METAL PRODUCTS-----	6	6	-----	-----	-----

## Waterborne Commerce of the United States, 1986

## OTHER HARBORS AND WATERWAYS

WATERWAY	COMMODITY	TONS	PASSENGERS
PORT OF BUFFALO			
BARCELONA HARBOR, N. Y.	NO COMMERCE REPORTED		
CAPE VINCENT, N. Y.			79,888
DUNKIRK HARBOR, N. Y.	NO COMMERCE REPORTED		
GREAT SOUS-WAY HARBOR, N. Y.	NO COMMERCE REPORTED		
KELLEYS ISLAND, OHIO	0191 MISCELLANEOUS FARM PRODUCTS	23	
	1442 SAND, GRAVEL, CRUSHED ROCK	705	
	2002 ANIMAL FEEDS	37	
	2094 GROCERIES	284	
	2095 ICE	69	
	2099 MISCELLANEOUS FOOD PRODUCTS	257	
	2413 FUEL WOOD, CHARCOAL, WASTES	3	
	2511 FURNITURE AND FIXTURES	26	
	2911 GASOLINE	521	
	2914 DISTILLATE FUEL OIL	434	
	2918 ASPHALT, TAR, AND PITCHES	909	
	2921 LIQUEFIED GASES	52	
	3511 MACHINERY, EXCEPT ELECTRICAL	2,173	
	3791 VISC TRANSPORTATION EQUIPMENT	558	
	4029 WASTE AND SCRAP, NEC	61	
	4112 COMMODITIES, NEC	1,681	
	TOTAL	7,793	183,603
NIAGARA FALLS, N. Y.	2911 GASOLINE	5,083	
	2914 DISTILLATE FUEL OIL	49,327	
	2915 RESIDUAL FUEL OIL	27,819	
	TOTAL	82,229	
NIAGARA RIVER, N. Y. (INCLUDED IN PORT OF BUFFALO)	0107 WHEAT	14,392	
	2911 GASOLINE	9,157	
	2914 DISTILLATE FUEL OIL	20,530	
	2915 RESIDUAL FUEL OIL	49,801	
	2918 ASPHALT, TAR, AND PITCHES	107,255	
	3511 MACHINERY, EXCEPT ELECTRICAL	20	
	TOTAL	201,155	
ODDESBURG HARBOR, N. Y.	1411 LIMESTONE	44,000	
	1451 CLAY	3,678	
	1499 NONMETALLIC MINERALS, NEC	69,055	
	2821 PLASTIC MATERIALS	90	
	2851 POTATOES	12	
	2891 MISCELLANEOUS CHEMICAL PROD	32	
	TOTAL	116,867	
PORT CLINTON HARBOR, OHIO	1442 SAND, GRAVEL, CRUSHED ROCK	13,300	
	2911 GASOLINE	78	
	2913 KEROSENE	21	
	2914 DISTILLATE FUEL OIL	22	
	2921 LIQUEFIED GASES	508	
	4112 COMMODITIES, NEC	5,148	
	TOTAL	19,077	64,902
ROCHESTER (CHARLOTTE) HARBOR, N. Y.	3201 BUILDING CEMENT	230,274	
	3511 MACHINERY, EXCEPT ELECTRICAL	33	
	3611 ELECTRICAL MACH AND EQUIP	10	
	4112 COMMODITIES, NEC	13	
	TOTAL	230,330	
SACKETT HARBOR, N. Y.	NO COMMERCE REPORTED		
TONAWANDA HARBOR, N. Y. (INCLUDED IN PORT OF BUFFALO)	NO COMMERCE REPORTED		
VERMILION HARBOR, OHIO	NO COMMERCE REPORTED		
WADDINGTON HARBOR, N. Y.	NO COMMERCE REPORTED		

# ROCK ISLAND, IL, DISTRICT

ILLINOIS RIVER, ILL. (INCLUDED IN THE  
ILLINOIS WATERWAY CONSOLIDATED)

SECTION INCLUDED: MOUTH OF ILLINOIS RIVER, GRAFTON, ILLINOIS, TO LOCKPORT, ILLINOIS, 291.0 MILES. CONTROLLING AND PROJECT DEPTHS: 9 FEET.

## COMPARATIVE STATEMENT OF TRAFFIC

YEAR	TONS	YEAR	TONS
1977-----	40,836,496	1982-----	39,471,855
1978-----	37,251,157	1983-----	41,028,849
1979-----	35,150,250	1984-----	37,085,576
1980-----	41,703,337	1985-----	36,534,770
1981-----	39,764,349	1986-----	39,991,394

\* PASSENGERS--60,496.

## FREIGHT TRAFFIC, 1986

### COASTWISE

(SHORT TONS)

COMMODITY	DOMESTIC COASTWISE SHIPMENTS
TOTAL-----	270
3511 MACHINERY, EXCEPT ELECTRICAL-----	270
TOTAL MILES, COASTWISE, 66,690.	

### INTERNAL (SHORT TONS)

COMMODITY	TOTAL	UPBOUND	INBOUND UPBOUND	OUTBOUND UPBOUND	THROUGH UPBOUND	DOWNBOUND	INBOUND DOWNBOUND	OUTBOUND DOWNBOUND	THROUGH DOWNBOUND
TOTAL-----	39,991,124	66,652	7,110,419	4,910,991	6,910,279	520,293	443,160	16,055,314	3,973,816
0103 CORN-----	8,678,712	4,738	1,603	5,320	-----	74,746	14,963	8,227,197	350,143
0104 OATS-----	15,724	-----	-----	-----	7,477	-----	-----	-----	8,247
0106 SORGHUM GRAIN-----	62,971	11,852	11,852	-----	-----	-----	-----	39,499	-----
0107 WHEAT-----	252,240	-----	-----	-----	1,578	-----	-----	121,614	129,048
0111 SOYBEANS-----	4,770,406	-----	-----	-----	-----	-----	-----	4,286,976	481,430
0841 CRUDE RUBBER AND ALLIED GUMS-----	2,838	-----	-----	-----	2,838	-----	-----	-----	-----
0931 MARINE SHELLS, UNMANUFACTURED-----	11,894	-----	-----	-----	11,894	-----	-----	-----	-----
1011 IRON ORE AND CONCENTRATES-----	61,073	-----	1,715	-----	59,358	-----	-----	-----	-----
1051 ALUMINUM ORES, CONCENTRATES-----	2,964	-----	-----	-----	2,964	-----	-----	-----	-----
1061 MANGANESE ORES, CONCENTRATES-----	22,256	-----	-----	-----	21,445	-----	-----	-----	811
1091 NONFERROUS ORES, CONCENT, NEC-----	9,637	-----	-----	-----	9,637	-----	-----	-----	-----
1121 COAL AND LIGNITE-----	7,545,250	-----	2,854,400	3,469,220	1,204,748	-----	10,980	1,617	4,285
1311 CRUDE PETROLEUM-----	140,229	-----	-----	-----	-----	-----	-----	-----	140,229
1411 LIMESTONE-----	24,170	-----	8,930	-----	15,240	-----	-----	-----	-----
1442 SAND, GRAVEL, CRUSHED ROCK-----	1,259,346	1,200	13,691	935,550	29,038	-----	240,300	38,085	1,482
1451 CLAY-----	1,409	-----	-----	-----	1,409	-----	-----	-----	-----
1471 PHOSPHATE ROCK-----	1,502	-----	1,502	-----	-----	-----	-----	-----	-----
1479 NATURAL FERTILIZER MATS, NEC-----	4,903	-----	4,903	-----	-----	-----	-----	-----	-----
1494 GYPSUM, CRUDE AND PLASTERS-----	20,483	-----	20,483	-----	-----	-----	-----	-----	-----
1499 NONMETALLIC MINERALS, NEC-----	875,872	-----	290,446	-----	583,978	-----	-----	-----	1,448
2014 TALLOW, ANIMAL FATS AND OILS-----	56,945	-----	-----	-----	-----	-----	-----	-----	56,945
2042 ANIMAL FEEDS-----	1,390,335	-----	28,399	-----	-----	-----	1,357,596	-----	4,340
2049 GRAIN MILL PRODUCTS, NEC-----	404,000	-----	1,600	-----	-----	-----	400,537	-----	1,863
2061 SUGAR-----	75,766	-----	75,766	-----	75,766	-----	-----	-----	-----
2062 MOLASSES-----	62,614	-----	11,819	-----	50,795	-----	-----	-----	-----
2091 VEGETABLE OILS, MARG, SHORT-----	32,959	-----	19,500	-----	9,362	-----	700	2,722	1,675
2415 PULPWOOD, LOG-----	1,384	-----	-----	-----	1,384	-----	-----	-----	-----
2421 LUMBER-----	10,449	-----	-----	-----	8,225	-----	-----	-----	2,224
2431 VENEER, PLYWOOD, WORKED WOOD-----	11,007	-----	-----	-----	11,007	-----	-----	-----	-----
2611 PULP-----	1,328	-----	-----	-----	1,328	-----	-----	-----	-----
2621 STANDARD NEWSPRINT PAPER-----	934	-----	-----	-----	934	-----	-----	-----	-----
2631 PAPER AND PAPERBOARD-----	19,120	-----	-----	-----	19,120	-----	-----	-----	-----
2810 SODIUM HYDROXIDE-----	570,400	-----	-----	-----	555,172	-----	-----	6,923	8,305
2811 CRUDE TAR, OIL, GAS PRODUCTS-----	203,444	-----	78,691	-----	33,602	-----	10,848	6,834	73,469
2813 ALCOHOLS-----	778,033	7,454	30,580	69,304	353,225	67,823	-----	246,803	2,844
2817 BENZENE AND TOLUENE-----	97,406	-----	30,000	-----	50,900	-----	-----	8,160	38,346
2818 SULPHURIC ACID-----	1,597	-----	-----	-----	-----	-----	-----	-----	1,597
2819 BASIC CHEMICALS AND PROD, NEC-----	1,527,054	-----	1,093,388	13,086	367,274	-----	13,956	12,906	26,444
2821 PLASTIC MATERIALS-----	1,827	-----	-----	-----	1,827	-----	-----	-----	-----
2871 NITROGENOUS CHEM FERTILIZERS-----	688,502	2,207	397,903	30,448	163,624	27,579	-----	43,594	23,147
2872 POTASSIC CHEM FERTILIZERS-----	199,764	17,752	177,541	-----	1,478	-----	-----	2,993	-----
2873 PHOSPHATIC CHEM FERTILIZERS-----	78,099	1,072	58,758	1,801	16,468	-----	-----	-----	-----
2879 FERTILIZER AND MATERIALS, NEC-----	860,291	1,605	821,376	-----	28,495	5,072	-----	664	3,079
2891 MISCELLANEOUS CHEMICAL PROD-----	87,392	-----	-----	-----	58,550	-----	-----	-----	28,842
2911 GASOLINE-----	790,160	-----	221,772	1,887	83,376	218,369	5,600	142,766	116,390
2912 JET FUEL-----	10,094	-----	4,486	-----	-----	-----	2,389	3,219	-----
2913 KEROSENE-----	54,799	-----	8,927	-----	26,893	-----	-----	18,979	-----
2914 DISTILLATE FUEL OIL-----	682,143	-----	202,166	123,931	13,980	88,790	5,576	180,147	67,533
2915 RESIDUAL FUEL OIL-----	1,129,442	-----	423,224	30,164	274,109	6,450	-----	191,041	204,450
2916 LUBRICATING OILS AND GREASES-----	342,277	-----	2,769	-----	263,401	-----	-----	-----	78,107
2917 NAPHTHA, PETROLEUM SOLVENTS-----	182,280	-----	51,129	-----	90,713	-----	-----	1,345	39,093
2918 ASPHALT, TAR, AND PITCHES-----	695,750	-----	130,433	1,428	211,156	1,160	-----	5,234	336,339
2920 COKE, PETROLEUM COKE-----	1,550,832	18,972	-----	223,914	235,164	30,302	17,938	492,501	532,041
2991 PETROLEUM AND COAL PROD, NEC-----	3,000	-----	-----	-----	1,400	-----	-----	-----	1,600

ILLINOIS RIVER, ILL. (INCLUDED IN THE  
ILLINOIS WATERWAY CONSOLIDATED)--CONTINUED

FREIGHT TRAFFIC, 1986--CONTINUED

INTERNAL--CONTINUED

(SHORT TONS)

[illegible]

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**SECTION 2**

**TRIPS AND DRAFTS OF VESSELS**

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## ST. PAUL, MN, DISTRICT (GREAT LAKES PORTION)

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## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						DIRECTION							
	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL		
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER			
DRAFT (FEET)														
TWO HARBORS (AGATE BAY), MINN.				INBOUND						OUTBOUND				
28 - - - - -	4					4	85			18			103	
27 - - - - -	4		3			7	25		3				28	
26 - - - - -			6			6	3		6				9	
25 - - - - -				11		11	1						1	
24 - - - - -	27		6	7		33			6				6	
23 - - - - -			3			7			3				4	
22 - - - - -	28					31	1							
21 - - - - -	14					14								
20 - - - - -	15					15	1						1	
18 - - - - -	22					22								
16 - - - - -	1					1								
12 AND LESS - - - - -	184					184	182						182	
TOTAL- - - - -	299		18	18		335	298		18	18			334	
DULUTH-SUPERIOR HARBOR, MINN. AND WIS.				INBOUND						OUTBOUND				
32 - - - - -							2						2	
29 - - - - -							93						93	
28 - - - - -	31					31	224						224	
27 - - - - -	8					8	76						76	
26 - - - - -	39		1			40	200		1				201	
25 - - - - -	13					13	14						14	
24 - - - - -	28					28	56						56	
23 - - - - -	124			1		125	41			1			42	
22 - - - - -	137					137	28						28	
21 - - - - -	39			1		40	27			1			28	
20 - - - - -	180				2	182	22						22	
19 - - - - -	28					28	5						5	
18 - - - - -	107					107	21						21	
17 - - - - -	68	1				69	21						21	
16 - - - - -	121		7			128	12		6				18	
15 - - - - -	8					8	4						4	
14 - - - - -	4		1			5	103	1			2		106	
13 - - - - -							1						1	
12 AND LESS - - - - -	1,373	150	38	40	1	1,602	1,363	150	38	41	1		1,593	
TOTAL- - - - -	2,308	151	47	42	3	2,551	2,313	151	45	43	3		2,555	
ASHLAND HARBOR, WIS.				INBOUND						OUTBOUND				
TOTAL, 22 AND LESS - - - - -	43					43	45						45	
BAYFIELD HARBOR, WIS.				INBOUND						OUTBOUND				
TOTAL, 10 AND LESS - - - - -	5,340					5,340	5,355						5,355	
BEAVER BAY HARBOR, MINN.				INBOUND						OUTBOUND				
TOTAL, 5 AND LESS - - - - -	198					198	198						198	
CHIPPEWA HARBOR (ISLE ROYALE), MICH.				NO VESSEL TRIPS REPORTED										
CORNUCOPIA HARBOR, WIS.				INBOUND						OUTBOUND				
TOTAL, 6 AND LESS - - - - -	159					159	157						157	
GRAND MARAIS HARBOR, MINN.				INBOUND						OUTBOUND				
TOTAL, 5 AND LESS - - - - -	66					66	66						66	
KNIFE RIVER HARBOR, MINN.				INBOUND						OUTBOUND				
TOTAL, 5 AND LESS - - - - -	66					66	68						68	
LA POINTE HARBOR, WIS.				INBOUND						OUTBOUND				
TOTAL, 6 AND LESS - - - - -	4,595					4,595	4,593						4,593	
LUTSEN HARBOR, MINN.				NO VESSEL TRIPS REPORTED										
PORT WING HARBOR, WIS.				INBOUND						OUTBOUND				
TOTAL, 5 AND LESS - - - - -	282					282	282						282	
HARROD HARBOR, MINN.				NO VESSEL TRIPS REPORTED										
SILVER BAY, MINN.				INBOUND						OUTBOUND				
TOTAL, 28 AND LESS - - - - -	196		1	1		198	199		1		1		201	
TACONITE HARBOR, MINN.				INBOUND						OUTBOUND				
TOTAL, 28 AND LESS - - - - -	137		1	1	2	141	137		2	1	2		142	

# Waterborne Commerce of the United States, 1986

## CHICAGO, IL, DISTRICT

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY				DIRECTION			DIRECTION					
DRAFT (FEET)	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	
MAUKEGAN HARBOR, ILL.												
22 -	13			INBOUND		13				OUTBOUND		
21 -	7					7						
20 -	10					10	2					2
19 -	3					3						
18 -	9					9	6					6
17 -	4					4	8					8
16 -	5					5	3					3
15 -	1					1						
14 -							3					3
13 -							8					8
12 AND LESS -			3	4		7	23		3	5		31
TOTAL -	52		3	4		59	53		3	5		61
CHICAGO RIVER (MAIN AND NORTH BRANCH), ILL.												
21 -				UPBOUND						DOWNBOUND		
20 -				2		2	28					28
19 -							1					1
18 -	20	1				20	1	3				3
17 -	9				2	11						1
16 -			1	1		2			1		1	2
15 -					1	2					1	1
14 -	1		3	1		4			3	1		4
13 -												
12 AND LESS -	142	3	514	1,062	199	1,920	142	1	516	1,065	197	1,921
TOTAL -	172	4	518	1,066	202	1,962	172	4	520	1,066	199	1,961
CHICAGO RIVER, SOUTH BRANCH, ILL.												
TOTAL, 12 AND LESS -	30	4	526	1,549	201	2,309	30	4	526	1,544	200	2,304
CHICAGO SANITARY AND SHIP CANAL, ILL.												
TOTAL, 12 AND LESS -	32	4	2,456	7,893	2,506	12,891	32	4	2,463	7,893	2,506	12,898
CALUMET-SAG CHANNEL, ILL.												
9 -	2		298	UPBOUND						DOWNBOUND		
8 -			198	1,052	379	2,331	3		298	1,084	475	1,860
7 -			161	128	123	449			198	116	30	344
6 -	1		12	21	5	187			161	38	14	213
5 -			1	20	9	42			12	11	9	32
4 -				8	2	11			1	10	3	14
3 -				6	5	11				1	5	6
2 -				1	38	39				2	17	19
1 -				312	429	741			1	840	429	1,270
				8	12	20				54	20	74
TOTAL -	3		670	2,156	1,002	3,831	3		671	2,156	1,002	3,832
LAKE CALUMET, ILL.												
27 -	2	2		INBOUND		4				OUTBOUND		
26 -	2					2		1				1
25 -		3				3		2				2
24 -	2	1				3		1				1
23 -	4					4						
22 -	21	2				23	1	1				2
21 -	4			1		5	3					3
20 -	3	2				5	7	2				9
19 -	2	1				3	3					3
18 -	1					1	3	1				4
17 -	3	1			4	8	3	2			3	8
16 -	2		8		3	13	8		8			18
15 -	1		11		3	15	11		10			21
14 -			2		1	3	8		1		1	10
13 -								1				1
12 AND LESS -			90	276	226	592			92	279	239	610
TOTAL -	47	12	111	277	237	684	47	13	111	279	243	693
CALUMET HARBOR AND RIVER, ILL. AND IND.												
29 -	1			EASTBOUND		1				WESTBOUND		
28 -							2	2				4
27 -	7					7	25	3				28
26 -	27	2				29	35	2				37
25 -	3	2				5	21	4				25
24 -	9	2				11	28	1				29
23 -	19					19	31	2				33
22 -	29	2				31	64	2				66
21 -	38	2		16		56	40	6		2	1	49
20 -	113	7		1		121	36	6				42
19 -	29	6			1	36	18	2			2	22
18 -	34	2				36	24	2				26
17 -	12	3	1		1	17	13	2			7	22
16 -	9	4	37		1	51	15	1	25		4	45
15 -	14		21	2		37	4		27	16	3	52
14 -	10	1	24		2	37	2		22	2	3	29
13 -	51	1		1		53	6		2			6
12 AND LESS -	111	1	791	2,180	390	3,473	152		808	2,186	375	3,503
TOTAL -	516	35	874	2,200	395	4,020	516	37	884	2,186	395	4,020

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HARBOR OR WATERWAY	DIRECTION					TOTAL	DIRECTION					TOTAL
	SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS			SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS		
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	
ILLINOIS WATERWAY, ILL.												
20 -	1			15		16	29			DOWNBOUND		31
19 -		1				1		3		2		3
18 -	20					20	1					1
17 -	9				2	10	1					1
16 -				1		1			2	1	1	4
15 -	1					1				15		15
14 -			18		1	19	1		15		1	17
13 -			3	1		4			3	1		4
12 AND LESS -	229	3	4,594	17,836	3,965	26,627	229	1	4,595	17,834	3,966	26,625
TOTAL -	259	4	4,615	17,853	3,968	26,699	261	4	4,615	17,853	3,968	26,701
INDIANA HARBOR, IND.												
29 -	90			INBOUND		91				OUTBOUND		
28 -	95			1		95						
27 -	106		1			107			1			1
26 -	28					28	4					4
25 -	5					5	2					2
24 -	5					5	10					10
23 -	4					4	31					34
22 -	4					4	49			1	2	52
21 -	12	1			1	14	89				3	123
20 -	7				7	14	81		1		18	100
19 -		2			5	7	7		51		4	62
18 -	2		1		1	4	65				4	69
17 -	1				1	2	3				3	6
16 -			81		3	84	1		81		20	102
15 -			25		14	39	1	1	25		3	30
14 -				1	35	36					2	2
13 -	10		1		1	12	13		2		3	18
12 AND LESS -	12	48	281	218	366	925	22	1	281	221	340	865
TOTAL -	381	51	390	220	434	1,476	378	54	390	222	436	1,480
JRNS WATERWAY HARBOR, IND.												
28 -	61			INBOUND		61				OUTBOUND		
27 -	32					32	3					3
26 -	35	2				37	13					13
25 -	19					19	6					6
24 -	9					9	6					6
23 -	8					8	7					7
22 -	5					5	63					63
21 -	3					3	8					9
20 -	5					5	31		2	1		33
19 -	4					4	15					15
18 -	5					5	23					23
17 -	4					4	19					19
16 -	1					1						
15 -	3			1		4						
14 -			1			1				1		1
13 -	18					18						
12 AND LESS -	40		16	405	45	506	58		16	406	47	527
TOTAL -	252	2	17	406</								

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY				DIRECTION			DIRECTION					
DRAFT (FEET)	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	
GARY HARBOR, IND. TOTAL, 29 AND LESS - - - - -	75		17	94	1	190	80		17	88	1	186

# DETROIT, MI, DISTRICT

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## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						DIRECTION					
	SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS		TOTAL
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	
<b>PRESQUE ISLE HARBOR, MICH.</b>				INBOUND						OUTBOUND		
30 -							1					1
29 -							55					55
28 -							17			3		20
27 -			3			3	1		2			3
26 -							3					3
25 -	2			2		4	17					17
24 -	38		1	1		40	33		2			35
23 -	36			1		37	16			1		17
22 -	17					17	5					5
21 -	9					9	1					1
20 -	6					6	4					4
19 -	10					10	2					2
18 -	15					15						
17 -	14					14	2					2
16 -	7					7						
15 -	2					2						
12 AND LESS -	5					5	2					2
TOTAL -	161		4	4		169	159		4	4		167
<b>MARQUETTE HARBOR, MICH.</b>				INBOUND						OUTBOUND		
26 -							1					1
24 -	1					1						
23 -	5					5	3					3
22 -	7					7						
21 -	1					1	3					3
20 -							4					4
18 -							1					1
17 -							2					2
16 -							2					2
12 AND LESS -	101					101	101					101
TOTAL -	115					115	117					117
<b>ONTONAGON HARBOR, MICH.</b>				INBOUND						OUTBOUND		
18 -	18					18	10					10
17 -							2					2
16 -							3		1			4
14 -			1			1						
10 -							2			1		3
9 -			1			1						
2 -				1		1						
TOTAL -	18		2	1		21	17		1	1		19
<b>ST. MARYS RIVER, MICH.</b>				UPBOUND						DOWNBOUND		
32 -							10					10
29 -							182			11		193
28 -	54					54	345			11		356
27 -	13		7			20	112		6			118
26 -	25		6	1		32	62		6			68
25 -	7			1		8	17					17
24 -	45		6	1		52	19		7			26
23 -	165			19		184	25					25
22 -	176		3		2	181	10		3			13
21 -	47			1	6	54	14			1		15
20 -	103				3	106	14				3	17
19 -	30				4	34	3				3	6
18 -	99				2	101	11					11
17 -	58				2	60	19				3	22
16 -	15		23			38	1		23		2	26
15 -	7				1	8			2		3	5
14 -			2			2	1				5	6
13 -					1	1	1					1
12 AND LESS -	28,364		20	22	4	28,410	28,361		22	25	4	28,412
TOTAL -	29,208		67	45	25	29,345	29,207		69	48	23	29,347
<b>ST. MARYS FALLS CANAL, MICHIGAN AND SAULT STE. MARIE, ONTARIO SHIP CANAL, CANADA</b>				EASTBOUND						WESTBOUND		
28 -	557			22		579	34					34
27 -	85		6			91	21		7			28
26 -	44		6			50	25		6	1		32
25 -	7					7	5			1		6
24 -	19		7			26	42		6	1		49
23 -	23					23	159			19		178
22 -	8					8	159		3			167
21 -	11		3	1		12	39			1		40
20 -	13					13	97				2	99
19 -	1					1	21					21
18 -	2					2	100					100
17 -	16				1	17	56					56
16 -	1		4			5	12		5			17
15 -			2			2	4					4
14 -	1			2		3			2			2
13 -	1					1					1	1
12 AND LESS -	3		2	7	2	14	17		3	5	2	27
TOTAL -	792		30	30	5	857	791		32	28	5	856

## Waterborne Commerce of the United States, 1986

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						DIRECTION					
DRAFT (FEET)	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	
DRUMMOND ISLAND, MICH.				INBOUND						OUTBOUND		
27 -							21					21
26 -							23					23
25 -							13					13
24 -							8					8
23 -							2					2
22 -							5					5
21 -							5					5
20 -							1					1
19 -							1					1
18 -							1					1
17 -							2					2
16 -							3					3
15 -							3					3
14 -							5					5
12 AND LESS -	10,094		1	10		10,171	10,094		16	10		10,120
TOTAL -	10,171		18	10		10,199	10,174		16	10		10,200
GRAYS REEF PASSAGE, MICH.				NORTHBOUND						SOUTHBOUND		
28 -							4					4
27 -							28					28
26 -							72					72
25 -							23					23
24 -							102					102
23 -				16	1	17	96					96
22 -				1	2	3	174					174
21 -				7	8	15	1					1
20 -				1	4	5	200					200
19 -					5	5	97					97
18 -					6	6	135					135
17 -					4	4	72					72
16 -					7	7	76					76
15 -					4	4	35					35
14 -					15	16	31					31
13 -					3	3	65					65
12 AND LESS -	42		19	42	20	129	28					28
TOTAL -	1,108	80	119	73	64	1,444	45	4	4	2	3	58
TRAVERSE CITY HARBOR, MICH.				INBOUND						OUTBOUND		
21 -							26					26
14 -							31					31
13 -							2					2
12 AND LESS -							1					1
TOTAL -	3	8	34		60	105	4	3	32		31	70
MANISTEE HARBOR, MICH.				INBOUND						OUTBOUND		
23 -							5					5
22 -							4					4
21 -							3					3
20 -							7					7
19 -							3					3
18 -							3					3
17 -							2					2
16 -							1					1
15 -							1					1
14 -							1					1
13 -							1					1
12 AND LESS -				9		9	6			5		11
TOTAL -	22		7	9		38	21		6	9		36
LUDINGTON HARBOR, MICH.				INBOUND						OUTBOUND		
23 -							3					3
22 -							2					2
21 -							4					4
20 -							2					2
19 -							315					315
18 -							92					92
17 -							1					1
16 -							7					7
15 -							10					10
14 -							2					2
13 -							3					3
12 AND LESS -				20	29	51	28			20	15	63
TOTAL -	417	2	37	3	30	489	418	1	37	3	29	488
MUSKEGON HARBOR, MICH.				INBOUND						OUTBOUND		
27 -							2					2
26 -							2					2
25 -							5					5
24 -							10					10
23 -							7					7
22 -				2		2	11					13
21 -							1					1
20 -							16					16
19 -							12					12
18 -							7					7
17 -							19					19

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						DIRECTION					
	SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS			SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS		
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	TOTAL	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	TOTAL
MUSKEGON HARBOR, MICH.--(CONTINUED)												
17 - - - - -	2					2	2					2
16 - - - - -			25			25	10		24		2	36
15 - - - - -			8			8	3		9		2	14
14 - - - - -			1			1	1		2		3	6
13 - - - - -										1		1
12 AND LESS - - - - -		1	20	37	19	77	1	3	23	33	18	78
TOTAL - - - - -	85	3	56	39	30	213	86	3	60	36	29	214
GRAND HAVEN HARBOR AND GRAND RIVER, MICH.												
24 - - - - -												
23 - - - - -	36					36	50					50
22 - - - - -	14	3				17	33					33
21 - - - - -	10					10	3			1		4
20 - - - - -	9					9	18	2				20
19 - - - - -	3					3	1					1
18 - - - - -	1	1				2	11					11
17 - - - - -	2	1			1	4	3	1				4
16 - - - - -	7		1			8	4	1	3			5
15 - - - - -	1			1		3	4	1	1			8
14 - - - - -	2		1			3	8		1			9
13 - - - - -	2					2						
12 AND LESS - - - - -			3	8		11			4	5	1	10
TOTAL - - - - -	87	5	6	9	1	108	138	5	8	6	1	158
HOLLAND HARBOR, MICH.												
23 - - - - -	6					6	2					2
22 - - - - -	8					8	4			1		5
21 - - - - -	11			1		12	2					2
20 - - - - -	5					5	12					12
19 - - - - -	1					1	3					3
18 - - - - -	1					1	6					6
17 - - - - -	1					1	1					1
16 - - - - -							1					1
15 - - - - -			2			2	1		2			3
14 - - - - -			1			1						
13 - - - - -							1					1
9 - - - - -			1			1			1			1
TOTAL - - - - -	33		4	1		38	33		3	1		37
ST. JOSEPH HARBOR, MICH.												
23 - - - - -	2					2						
22 - - - - -	37					37	1					1
21 - - - - -	12					12	2					2
20 - - - - -	3					3	4					4
19 - - - - -							3					3
18 - - - - -	1					1	11					11
17 - - - - -							8					8
16 - - - - -							6		1			7
15 - - - - -			1			1	2			1		3
14 - - - - -							1		1			2
13 - - - - -							10					10
12 AND LESS - - - - -			29	32		61	6		28	31		65
TOTAL - - - - -	55		30	32		117	54		30	32		116
MILWAUKEE HARBOR, WIS.												
28 - - - - -	5					5						
27 - - - - -	6					6	11					11
26 - - - - -	7	1				8	9					9
25 - - - - -	11	1				12	9					9
24 - - - - -	7					7	18					18
23 - - - - -	11					11	9					9
22 - - - - -	19			4		23	7	3				10
21 - - - - -	56			1		57	12					12
20 - - - - -	25					25	7					7
19 - - - - -	25	1				26	5					5
18 - - - - -	15					15	3	1				4
17 - - - - -	5					5	8					8
16 - - - - -	8	2	3			13	5	1	3			9
15 - - - - -	8		1			9	9		1	5		15
14 - - - - -	1		4			5	25		6			31
13 - - - - -							69					69
12 AND LESS - - - - -	542	13	45	51	9	660	547	13	43	49	9	661
TOTAL - - - - -	751	18	53	56	9	867	753	18	53	54	9	867
PORT WASHINGTON HARBOR, WIS.												
21 - - - - -	15					15	13					13
20 - - - - -	1					1						
19 - - - - -							2					2
18 - - - - -							1					1
TOTAL - - - - -	16					16	16					16

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						DIRECTION					
	SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS		TOTAL
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	
DRAFT (FEET)												
SHEBOYGAN HARBOR, WIS.												
20 - - - - -	29					29	66					66
19 - - - - -							6					6
18 - - - - -							1					1
16 - - - - -			2			2	2					2
15 - - - - -	4					4						
14 - - - - -	1					1						
13 - - - - -	40					40						
12 AND LESS - - - - -			2		2	4			6		2	8
TOTAL - - - - -	74		4		2	80	75		6		2	83
KEWAUNEE HARBOR, WIS.												
19 - - - - -	287					287	314					314
18 - - - - -	88					88	88					88
14 - - - - -			1			1			1			1
12 AND LESS - - - - -	29			2		30				3		3
TOTAL - - - - -	403		1	2		406	402		1	3		406
GREEN BAY HARBOR, WIS.												
26 - - - - -	5					5	5					5
25 - - - - -	13					13	2					2
24 - - - - -	11					11	4	1				5
23 - - - - -	9	1		1		11	4	2				6
22 - - - - -	51			1		52	5	1				6
21 - - - - -	32			10		42	8	1				9
20 - - - - -	28	3				31	25					25
19 - - - - -	11				1	12	10					10
18 - - - - -	7	2				9	35			1		36
17 - - - - -	2	4				6	21					21
16 - - - - -			1	1	6	8	17	2	1			20
15 - - - - -	1		5			6	4	1	5	13		23
14 - - - - -			12			12	1		14		1	16
13 - - - - -			1			1	12		1			13
12 AND LESS - - - - -	257			1		258	272	1		1	6	280
TOTAL - - - - -	427	10	19	14	7	477	425	9	21	15	7	477
STURGEON BAY AND LAKE MICHIGAN SHIP CANAL, WIS.												
23 - - - - -	6		2			10	5		2			7
22 - - - - -	2					2	1					1
21 - - - - -	9					9	8					8
20 - - - - -	5					5	3					3
19 - - - - -	2				1	3	1					1
18 - - - - -	1					1	1					1
17 - - - - -	2					2	1					1
16 - - - - -	3		3		2	8	2		3		2	7
15 - - - - -			4			4			3			3
14 - - - - -			9		1	10			8			8
13 - - - - -	1		1			2	2				1	3
12 AND LESS - - - - -	211		5	13	2	231	209		5	15	1	230
TOTAL - - - - -	242		24	15	6	287	233		21	15	4	273
ALPENA HARBOR, MICH.												
22 - - - - -							175					175
21 - - - - -	13			3		16	38			1		39
20 - - - - -	4					4	8					8
19 - - - - -	4					4	5					5
18 - - - - -							18					18
17 - - - - -	71				2	73	6				2	8
16 - - - - -	5					5	2					2
15 - - - - -	2		5		1	8	1		5	2		8
14 - - - - -	14		2			16	2		2			2
13 - - - - -	64		1			65	1		1			2
12 AND LESS - - - - -	77				6	83					6	6
TOTAL - - - - -	254		8	3	9	274	254		8	3	8	273
SAGINAW RIVER, MICH.												
25 - - - - -	45	2				47	2	3				5
24 - - - - -	70	3				73	4					4
23 - - - - -	52	2				54	20					20
22 - - - - -	37	1				38	13	7				20
21 - - - - -	13	2		1		16	16					16
20 - - - - -	15	1				16	59	1				60
19 - - - - -	8	2				10	18	5				23
18 - - - - -	8				3	11	26	1				27
17 - - - - -	2				1	3	23		1			24
16 - - - - -			3			3	34		5			39
15 - - - - -			5			5	5		7			13
14 - - - - -	1		1		2	4	4			1		5
13 - - - - -					2	2	16	1				17
12 AND LESS - - - - -	1	7	1	1		10	13	1		7		21
TOTAL - - - - -	252	20	10	2	8	292	253	19	13	1	8	294

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						DIRECTION						
	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS			TOTAL	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	PASSENGER AND DRY CARGO		TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		
DRAFT (FEET)													
ST. CLAIR RIVER, MICH.					UPBOUND						DOWNBOUND		
29								166			8		174
28		30					30	269			3		272
27		8		9			17	135					144
26		5		1			7	204		9			204
25		10					11	98					98
24		36		1	1		38	29		2			31
23		201			9		210	69					69
22		182					184	79					84
21		110	2		3	1	114	41	5		10		71
20		177				6	183	43					43
19		50				2	57	5		6		1	12
18		88				1	89	11				3	14
17		125	1			8	134	16				14	30
16		29				3	82	8				10	66
15		44			5		85	2			46	8	57
14		31				4	43				45	6	18
13		9				6	18				12	3	4
12 AND LESS-	22,315	15	12	4	72	22,418	22,257	10	4	3	57	22,331	
TOTAL-	23,451	23	120	23	103	23,720	23,452	21	119	26	102	23,720	
PORT HURON, MICH.					INBOUND						OUTBOUND		
27		2				2							
26		5				5	1						1
25		6				6	4						4
24		1				1	1						1
23		2				2	1						1
22		8				8	3						3
21		5				5	1						1
20		8				8	7						7
19		1				1	1						1
18		7				7	1						1
17		3				3	5						5
16		1				3	17			5			22
15		1		2	1	4	7			1			8
14										4		1	2
13										1			4
12 AND LESS-			10	2	2	14	1			1	3	3	8
TOTAL-	50		14	3	2	69	50		12	3	4	69	
ST. CLAIR, MICH.					INBOUND						OUTBOUND		
27		127				127							
26		9				9							
25		2				2							
24		7				7							
23		5				5	47						47
22		5				5	10						10
21		3				3	5						5
20		4				4	41						41
19		2				2	4						4
18		3				3	22						22
17		1				1	31						31
16							4						4
15							2						2
14													
13													
12 AND LESS-	3		2		2	5	1		2	1		4	
TOTAL-	171		2		2	175	167		2	1		170	
MARINE CITY, MICH.					INBOUND						OUTBOUND		
28		1				1							
26		7				7	1						1
25		3				3							
24		2				2							
23							2						2
22		8				8							
21		1				1	2						2
20		2				2	8						8
17							1						1
16							9						9
7	3,350					13,350	13,350						13,350
4			1			1				1			1
TOTAL-	3,374		1			13,375	13,373		1				13,374
CHANNELS IN LAKE ST. CLAIR					UPBOUND						DOWNBOUND		
28		30				30	319				11		330
27		8		9		17	122			9			131
26		12		1		13	182						182
25		10			1	11	89						89
24		36		1	1	38	28			2			30
23		156			9	165	71						71
22		172				173	65						70
21		105			3	109	56				10		66
20		134				137	37						37
19		49				49	7		6			1	14
18		78				78	12					3	15
17		101				102	23					14	37
16		13		33		87	19					10	64

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						DIRECTION					
	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS			SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	TOTAL	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	TOTAL
CHANNELS IN LAKE ST. CLAIR--(CONTINUED)												
15 - - - - -	43		32	5		80	2		33	2	5	42
14 - - - - -	31		10		1	42			10		5	15
13 - - - - -	9		2		5	16			1		3	4
12 AND LESS - - - - -	44	15	4	4	63	130		5	2	3	35	45
TOTAL - - - - -	1,031	16	92	23	75	1,237	1,032	16	92	26	76	1,242
DETROIT RIVER, MICH.												
29 - - - - -												
28 - - - - -	36					36	121					129
27 - - - - -	11		9			20	193			3		196
26 - - - - -	5		1			6	120		9			129
25 - - - - -	12			1		13	188					188
24 - - - - -	38		1	1		40	89					89
23 - - - - -	174			9		183	28		2			30
22 - - - - -	229	1				230	77					77
21 - - - - -	161			7	1	169	70	5		10		75
20 - - - - -	160				3	163	64					74
19 - - - - -	61					61	66					66
18 - - - - -	82					82	18	13			3	34
17 - - - - -	102				1	103	32				3	35
16 - - - - -	15		47		1	63	81				18	99
15 - - - - -	55		44	2		101	31		43		21	95
14 - - - - -	518		10		1	529	5		48	3	5	61
13 - - - - -	8		4		4	16	503		13		5	521
12 AND LESS - - - - -	1,259	22	6	156	90	1,533	3		3		3	6
TOTAL - - - - -	2,926	23	122	176	101	3,348	1,241	5	4	155	41	1,446
DETROIT HARBOR, MICH.												
29 - - - - -	6					6						
28 - - - - -	25					25	21					21
27 - - - - -	11	1				12	2	1				3
26 - - - - -	54	1				55	14	2				16
25 - - - - -	20	1				21	6	1				7
24 - - - - -	25	4				29	16	3				19
23 - - - - -	17					17	31	1				32
22 - - - - -	52			3		55	31	1				32
21 - - - - -	58					58	35	1				36
20 - - - - -	31	2				33	59	1				60
19 - - - - -	14	1			1	16	33					33
18 - - - - -	9	1				10	16	1				17
17 - - - - -	6	1	3		1	11	18	1	5			24
16 - - - - -	9	2	3	2	2	18	24		5			29
15 - - - - -	13		5	1		19	2		5		1	8
14 - - - - -	507					507	531			5	1	537
13 - - - - -	4		2			6	5		3	1		9
12 AND LESS - - - - -	1,263	1	327	317	6	1,914	1,281	1	318	316	8	1,924
TOTAL - - - - -	2,124	15	340	323	10	2,812	2,125	14	336	322	10	2,807
ROUGE RIVER, MICH.												
25 - - - - -	189					189	28					28
24 - - - - -	14					14	6					6
23 - - - - -	37	1				38	17					17
22 - - - - -	52			1		53	48					48
21 - - - - -	43			5		48	21					22
20 - - - - -	41					41	50				1	51
19 - - - - -		2				2	14				3	27
18 - - - - -	5				1	6	47	11			2	49
17 - - - - -	2	1	1		2	6	59					61
16 - - - - -	6		32		10	48	10		1	2	12	24
15 - - - - -	2		30		5	37	29		32	5	3	66
14 - - - - -	1		5		4	10		1	6	1	1	9
13 - - - - -	2		3		2	7			5		3	9
12 AND LESS - - - - -	1	9	211	321	50	592	63	3	203	325	50	644
TOTAL - - - - -	395	13	282	327	74	1,091	393	15	276	333	77	1,094
ECORSE, MICH.												
20 - - - - -	75					75	70					70
19 - - - - -	2					2	3					3
18 - - - - -	3					3	8					8
17 - - - - -	3					3	3					3
16 - - - - -	6		2			9	4		1			5
15 - - - - -	1		1	1		3	1					4
14 - - - - -	1		1		1	3	3		2			5
13 - - - - -	2		2			4	1		1	1		3
12 AND LESS - - - - -	4		3	1	2	10	4		3	1	1	9
TOTAL - - - - -	94		9	2	3	108	96		7	1	2	106
TRENTON, MICH.												
28 - - - - -	32					32						
26 - - - - -	4					4						
25 - - - - -	4					4						
22 - - - - -	1					1						
21 - - - - -							5					5
20 - - - - -							3					3

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION					DIRECTION				
	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS	
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER
DRAFT (FEET)										
ARENTON, MICH.--(CONTINUED)				INBOUND					OUTBOUND	
19 - - - - -					3	4				4
18 - - - - -					9	16				16
17 - - - - -					1	9			12	21
16 - - - - -			5		6	5		4	1	10
15 - - - - -			16		2	1		16	2	19
14 - - - - -			1		1			3	2	5
13 - - - - -			6		4			5	3	8
12 AND LESS - - - - -	1,226				14	1,226		1	13	1,240
TOTAL - - - - -	1,269		28		30	1,269		29	33	1,331
PORT OF DETROIT, MICH.				INBOUND					OUTBOUND	
29 - - - - -	44			1	45					22
28 - - - - -	61				61	22				4
27 - - - - -	38	1	2		41	3	1			87
26 - - - - -	158	1			159	45	2			15
25 - - - - -	55	1			59	14	1			36
24 - - - - -	53	4			57	33	3			51
23 - - - - -	59	1			60	50	1			96
22 - - - - -	131			4	135	95	1			80
21 - - - - -	117			5	122	78	1		1	129
20 - - - - -	79	2			61	125	1		3	68
19 - - - - -	20	3			24	55	11		2	92
18 - - - - -	17	1			72	49	1		2	111
17 - - - - -	12	2	4		30	92	1	6	12	99
16 - - - - -	21	2	46	3	82	44		38	5	93
15 - - - - -	15		51	1	75	33		49	6	556
14 - - - - -	509		9		575	534	1	11	6	27
13 - - - - -	6		13		25	6		13	1	641
12 AND LESS - - - - -	1,272	11	528	640	73	1,347	2	536	67	2,593
TOTAL - - - - -	2,670	29	653	654	121	2,665	27	653	655	4,119
MONROE HARBOR, MICH.				INBOUND					OUTBOUND	
21 - - - - -	35			3	38	11				11
20 - - - - -	5				5	9				9
19 - - - - -	3				3	6				6
18 - - - - -	1			1	2	3				3
17 - - - - -						9				9
16 - - - - -	1		3		4	5		3		8
15 - - - - -	2			1	3	3			4	7
14 - - - - -			3	2	5	1		2	3	6
13 - - - - -			1	1	2			2	1	3
12 - - - - -								1		1
11 - - - - -				1	1					2
10 - - - - -			1	1	2			2		
9 - - - - -			1		1					
8 - - - - -			1		1					
7 - - - - -				1	1					
6 - - - - -										
5 - - - - -				2	2				2	2
4 - - - - -									4	1
3 - - - - -										
2 - - - - -										
TOTAL - - - - -	47		10	13	70	47		10	14	72
ALGOMA HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
ALGONAC, MICH.				INBOUND					OUTBOUND	
TOTAL, 9 AND LESS - - - - -	8,914				8,914	8,914				8,914
AU SABLE HARBOR AND RIVER (OSCODA), MICH.				NO VESSEL TRIPS REPORTED						
BIG BAY HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
BLACK RIVER HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
CASEVILLE, MICH.				NO VESSEL TRIPS REPORTED						
CEDAR RIVER HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
CHARLEVOIX HARBOR, MICH.				INBOUND					OUTBOUND	
TOTAL, 18 AND LESS - - - - -	278		2	2	282	279		2	1	282
CHEBOYGAN HARBOR, MICH.				INBOUND					OUTBOUND	
TOTAL, 21 AND LESS - - - - -	417	2	22	21	462	418	4	21	23	466
DETOUR, MICH., AND VICINITY				INBOUND					OUTBOUND	
TOTAL, 23 AND LESS - - - - -	10,096		16	15	10,127	10,093		14	15	10,122

## Waterborne Commerce of the United States, 1986

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION					DIRECTION				
	DRAFT (FEET)	SELF PROPELLED VESSELS			TOTAL	SELF PROPELLED VESSELS			TOTAL	DIRECTION
		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT		
DETROIT HARBOR, MICH. TOTAL, 9 AND LESS - - - - -	3,293				3,293	3,294			3,294	OUTBOUND
EAGLE HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
FRANKFORT HARBOR, MICH. TOTAL, 19 AND LESS - - - - -			1	16	33		1	15	30	OUTBOUND 4 10
GLADSTONE HARBOR, MICH. TOTAL, 23 AND LESS - - - - -	1	1	3		7	2	1	3	6	OUTBOUND 2
GRAND MARAIS HARBOR (HARBOR OF REFUGE), MICH. TOTAL, 16 AND LESS - - - - -				3	7			3	6	OUTBOUND 5
GRAND TRAVERSE BAY HARBOR, MICH. TOTAL, 5 AND LESS - - - - -	12				12	12			12	OUTBOUND
HARBOR BEACH, MICH., HARBOR OF REFUGE, LAKE HURON TOTAL, 23 AND LESS - - - - -	11				11	11			11	OUTBOUND
HARRISVILLE HARBOR, MICH., HARBOR OF REFUGE, LAKE HURON				NO VESSEL TRIPS REPORTED						
KENOSHA HARBOR, WIS. TOTAL, 27 AND LESS - - - - -	18				18	18			18	OUTBOUND
Keweenaw Waterway, MICH. TOTAL, 24 AND LESS - - - - -	274			40	314	273		40	313	WESTBOUND
LAC LA BELLE HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
LELAND HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
LIME ISLAND, MICH.				NO VESSEL TRIPS REPORTED						
MACKINAC HARBOR, MICH. TOTAL, 20 AND LESS - - - - -	5,308			14	5,337	5,310		13	5,337	OUTBOUND 14
MACKINAW CITY HARBOR, MICH. TOTAL, 19 AND LESS - - - - -	795	26	2		825	794	24	2	822	OUTBOUND 2
MANISTIQUE HARBOR, MICH. TOTAL, 18 AND LESS - - - - -	1				1	1			1	OUTBOUND
MANITOWOC HARBOR, WIS. TOTAL, 22 AND LESS - - - - -	21			40	121	21		40	124	OUTBOUND 63
MARYSVILLE, MICH. TOTAL, 25 AND LESS - - - - -	20	2	16		56	20	2	17	58	OUTBOUND 9 10
MEMPHINEE HARBOR AND RIVER, MICH. AND WIS. TOTAL, 23 AND LESS - - - - -	17				17	16			16	OUTBOUND
NEW BUFFALO HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
OCONTO HARBOR, WIS.				NO VESSEL TRIPS REPORTED						
PENSAUKEE HARBOR, WIS.				NO VESSEL TRIPS REPORTED						
PENTWATER HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
PORT SANILAC HARBOR, MICH.				NO VESSEL TRIPS REPORTED						
PUT-IN-BAY HARBOR, OHIO TOTAL, 7 AND LESS - - - - -	5,045				5,045	5,044			5,044	OUTBOUND
RACINE HARBOR, WIS.				NO VESSEL TRIPS REPORTED						

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION					DIRECTION				
	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS	
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER
DRAFT (FEET)										
ROGERS CITY, MICH.		NO VESSEL TRIPS REPORTED								
SAUGATUCK HARBOR AND KALAMAZOO RIVER, MICH. TOTAL, 8 AND LESS - - - - -	360			INBOUND		360			OUTBOUND	360
SAULT STE. MARIE, MICH. TOTAL, 28 AND LESS - - - - -	16,014	1	53	16	21	16,105	16,013	1	60	22 23 16,119
SEBENWING, MICH.		NO VESSEL TRIPS REPORTED								
SOUTH HAVEN HARBOR, MICH.		NO VESSEL TRIPS REPORTED								
ST. JAMES (BEAVER ISLAND), MICH. TOTAL, 8 AND LESS - - - - -	273			INBOUND		273			OUTBOUND	273
TWO RIVERS HARBOR, MICH. TOTAL, 9 AND LESS - - - - -			3	INBOUND	2	5		3	OUTBOUND	2 5
WHITE LAKE HARBOR, MICH.		NO VESSEL TRIPS REPORTED								
WHITEFISH POINT HARBOR, MICH.		NO VESSEL TRIPS REPORTED								
WYANDOTTE, MICH. TOTAL, 23 AND LESS - - - - -	11			INBOUND		11	10		OUTBOUND	10
ALABASTER, MICH. TOTAL, 22 AND LESS - - - - -	55			INBOUND		55	55		OUTBOUND	55
CALCITE, MICH. TOTAL, 25 AND LESS - - - - -	365		3	INBOUND	3	371	368	3	OUTBOUND	3 374
ESCANABA, MICH. TOTAL, 30 AND LESS - - - - -	238	6	23	INBOUND	6 14	247	236	5 22	OUTBOUND	6 19 248
MARBLEHEAD, OHIO TOTAL, 24 AND LESS - - - - -	3,513			INBOUND	1	3,514	3,514		OUTBOUND	1 3,515
PORT DOLOMITE, MICH. TOTAL, 28 AND LESS - - - - -	110		25	INBOUND	42	177	109	25	OUTBOUND	42 176
PORT GYPSUM, MICH. TOTAL, 23 AND LESS - - - - -	25		1	INBOUND	1	27	25	1	OUTBOUND	1 27
PORT INLAND, MICH. TOTAL, 26 AND LESS - - - - -	128		16	INBOUND	34	178	128	16	OUTBOUND	36 180
STONEPORT, MICH. TOTAL, 27 AND LESS - - - - -	305		1	INBOUND	1	307	303	1	OUTBOUND	1 305

## Waterborne Commerce of the United States, 1986

## BUFFALO, NY, DISTRICT

TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY				DIRECTION			DIRECTION						
DRAFT (FEET)	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL	
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		
TOLEDO HARBOR, OHIO													
28 -	42			INBOUND		42	8			OUTBOUND		8	
27 -	30	5	4			39	132	1	4			137	
26 -	56	2				58	59	1				60	
25 -	60	1				61	51	2		1		54	
24 -	77					77	97	1		1		99	
23 -	119	1		4		124	121	3		2		126	
22 -	63					63	137	3				140	
21 -	46			1		47	117					117	
20 -	102					102	93	3				96	
19 -	61	1				62	47	1				48	
18 -	94	1				95	18					18	
17 -	80	2				82	31	2		1		34	
16 -	50		18			68	7	1	18		1	27	
15 -	14		3			17	5		3	2		10	
14 -	18		3			21	13		2		3	18	
13 -	7		1			8	1		1			2	
12 AND LESS-	1,480	10	519	515	28	2,552	1,460	9	519	518	24	2,530	
TOTAL-	2,399	23	548	520	28	3,518	2,397	27	547	525	28	3,524	
SANDUSKY HARBOR, OHIO													
26 -	3			INBOUND		3	100			OUTBOUND		100	
25 -	12					12	1					1	
24 -	15					15	1					1	
23 -	45					45	13					13	
22 -	33					33	21					21	
21 -	15			4		19	15					15	
20 -	9					9	12					12	
19 -	2					2	5					5	
18 -	10					10	3					3	
17 -	23					23	1					1	
16 -	6					6	6			3		9	
15 -							4					2	
14 -	1		4			1			2			1	
13 AND LESS-	2,554			5		2,559	2,548			4		2,552	
TOTAL-	2,728		4	9		2,741	2,727		2	7		2,736	
MURON HARBOR, OHIO													
22 -	10			INBOUND		10	4			OUTBOUND		4	
20 -							5					5	
19 -	1					1	2					2	
18 -							1					1	
16 -	1					1							
14 -	1					1							
12 AND LESS-	1					1	1					1	
TOTAL-	14					14	13					13	
LORAIN HARBOR, OHIO													
29 -	20			INBOUND		21				OUTBOUND			
28 -	71			1		71							
27 -	40		1			41	15		1			16	
26 -	17					17	91					91	
25 -	2					2	61					61	
24 -	3					3	42					42	
23 -	21					21	46			1		47	
22 -	1					1	13					13	
21 -	3					3	11					11	
20 -	19					19	31					31	
19 -	8					8	5					5	
18 -	37					37	18					18	
17 -	114					114	5					5	
16 -							1					1	
15 -	1					1	3			1		4	
14 -							6					6	
12 AND LESS-	172					172	165					165	
TOTAL-	529		1	1		531	533		1	2		536	
CLEVELAND HARBOR, OHIO													
29 -	14			INBOUND		14				OUTBOUND			
28 -	12					12	7					7	
27 -	22					22	1					1	
26 -	253	1				254	76	1				77	
25 -	120					120	24					24	
24 -	79					79	31					31	
23 -	47					47	42					42	
22 -	46	2				48	41	2				43	
21 -	24	3		1		28	22			6		28	
20 -	21	1			2	24	95				1	96	
19 -	12	7				19	44					44	
18 -	15					16	86					86	
17 -	39					43	169				1	170	
16 -	4		19	1		32	10		25	2		37	
15 -	1		13	6	3	23	45	1	12		1	59	
14 -			7	2		9	5		8			13	
13 -	2			1	1	4	6		1			11	
12 AND LESS-	441	2	5	3	34	485	448	11	6	4	43	512	
TOTAL-	1,152	16	44	12	55	1,279	1,152	19	52	12	46	1,281	

TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION					DIRECTION				
	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS	
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER
DRAFT (FEET)										
<b>FAIRPORT HARBOR, OHIO</b>										
27 -	24			INBOUND		10			OUTBOUND	
26 -	16					14				
25 -	20					3				
24 -	7					2				
23 -	23					13				
22 -	10					6				
21 -	3			1		11			5	
20 -	5					13				
19 -	1					7				
18 -	4					11				
17 -	5					6				
16 -						6				
15 -	1			4		13				
14 -			4					5		
12 AND LESS -	216					216				
TOTAL -	335		4	5		333		5	5	
<b>ASHTABULA HARBOR, OHIO</b>										
29 -	26			INBOUND		48			OUTBOUND	
28 -	21			5		24				
27 -	19		7	3		20		7		
26 -	11					6				
25 -	26					8				
24 -	46		1			10		1		
23 -	30					29			8	
22 -	8					34				
21 -	11			3		20				
20 -	12					16				
19 -	4					14				
18 -	20					20				
17 -	12					5				
16 -	6					4				
15 -						1			3	
14 -			3			2		3		
13 -						1				
12 AND LESS -										
TOTAL -	252		11	11		246		11	11	
<b>CONNEAUT HARBOR, OHIO</b>										
27 -	15		1	INBOUND		153		1	OUTBOUND	
26 -	14			2		10				
25 -	22					4				
24 -	101		1			16		1		
23 -	36					12			2	
22 -	13					35				
21 -	16					21				
20 -	19					11				
19 -	10					2				
18 -	13					14				
17 -	7					3				
16 -	6									
15 -	1					1				
TOTAL -	273		2	2		261		2	2	
<b>ERIE HARBOR, PA.</b>										
27 -	3		1	INBOUND		4		1	OUTBOUND	
26 -	7					3		1		
25 -	2					2				
24 -	5		1			5				
23 -	8			2		2			2	
22 -	14					4				
21 -	9					4				
20 -	3					1				
19 -	4					6				
18 -	3					4				
17 -	3					5				
16 -	1					1				
15 -						19				
14 -	90					90				
13 -	23					24				
12 AND LESS -	537		3			540		2		
TOTAL -	712		5	2		714		4	2	
<b>BUFFALO HARBOR, N. Y.</b>										
28 -	2			INBOUND					OUTBOUND	
27 -	7					1				
26 -	4					4				
25 -	5	1				5	1			
24 -	13					1				
23 -	24					1				
22 -	17	1				18				
21 -	11	1		1		13				
20 -	9	1				2	1			
19 -	2					7		1		
18 -	7				2	9				1
17 -	6				12	26	1			

### TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY	DIRECTION						TOTAL	DIRECTION					
	SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS				SELF PROPELLED VESSELS			NON SELF PROPELLED VESSELS		
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	PASSENGER AND DRY CARGO		TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		
DRAFT (FEET)													
BUFFALO HARBOR, N. Y.--(CONTINUED)				INBOUND						OUTBOUND			
16 -	8		2			10	7	4				11	
15 -	1		11		1	13	5		13	1		19	
14 -			1			1	1		6	1	1	9	
13 -			2			2	1		1			2	
12 AND LESS-	5	4	3	5	1	16	6	7	4	4	17	30	
TOTAL-	121	8	19	4	16	168	104	14	25	6	19	168	
PORT OF BUFFALO, N. Y.				INBOUND						OUTBOUND			
28 -	2					2							
27 -	7					7	1					1	
26 -	4					4	4					4	
25 -	5	1				6	5	1				6	
24 -	13					13	1					1	
23 -	24					24	2					2	
22 -	17	11				28	1					1	
21 -	11	3		1		15	6	1				7	
20 -	9	3				12	1	3				4	
19 -	1	9			2	12	8		1			9	
18 -	6				5	11	29				1	30	
17 -	3				12	15	31	1				32	
16 -	4		10	1	8	23	11	5	9	1		26	
15 -	1		19		1	21	5		19	1		25	
14 -			1			1	1		5	1	1	8	
13 -			5			5	1	1	2			4	
12 AND LESS-	8	5	5	4	6	28	6	21	4	4	32	67	
TOTAL-	115	32	40	6	34	227	113	33	40	7	34	227	
OSWEGO HARBOR, N. Y.				INBOUND						OUTBOUND			
25 -	2	1				3		1				1	
24 -	2					2							
23 -	2					2							
22 -	14	2				16							
21 -	5	12				17		3				3	
20 -	22	13				35	21	2				23	
19 -	31	8				39	31	13		1		45	
18 -	20	2				22	38	10				48	
17 -	3					3	8	6				14	
16 -	3					3	5					5	
15 -				1		1	1	1	2			2	
13 -						1		1				3	
12 AND LESS-	96		3	3	41	143	95		3	2	39	139	
TOTAL-	200	38	4	4	41	287	199	37	5	3	39	283	
BARCELONA HARBOR, N. Y.				NO VESSEL TRIPS REPORTED									
CAPE VINCENT, N. Y.				INBOUND						OUTBOUND			
TOTAL, 6 AND LESS -	2,421					2,421	2,421					2,421	
DUNKIRK HARBOR, N. Y.				NO VESSEL TRIPS REPORTED									
GREAT SODAS BAY HARBOR, N. Y.				NO VESSEL TRIPS REPORTED									
KELLEYS ISLAND, OHIO				INBOUND						OUTBOUND			
TOTAL, 7 AND LESS -	3,726					3,726	3,726					3,726	
NIAGARA FALLS, N. Y.				INBOUND						OUTBOUND			
TOTAL, 7 AND LESS -	4	20				24	4	20				24	
NIAGARA RIVER, N. Y.				NORTHBOUND						SOUTHBOUND			
TOTAL, 21 AND LESS -	2	23	18	1	17	61	1	25	18	2	16	62	
OGDENSBURG HARBOR, N. Y.				INBOUND						OUTBOUND			
TOTAL, 19 AND LESS -	10					10	8					8	
PORT CLINTON HARBOR, OHIO				INBOUND						OUTBOUND			
TOTAL, 10 AND LESS -	2,010					2,010	2,011					2,011	
ROCHESTER (CHARLOTTE) HARBOR, N. Y.				INBOUND						OUTBOUND			
TOTAL, 19 AND LESS -	57					57	57					57	
SACKETT HARBOR, N. Y.				NO VESSEL TRIPS REPORTED									
TONAWANDA HARBOR, N. Y.				NO VESSEL TRIPS REPORTED									
VERMILION HARBOR, OHIO				NO VESSEL TRIPS REPORTED									

**BUFFALO, NY, DISTRICT**

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### TRIPS AND DRAFTS OF VESSELS

[illegible]

# ROCK ISLAND, IL, DISTRICT

## *Waterborne Commerce of the United States, 1986*

## TRIPS AND DRAFTS OF VESSELS

HARBOR OR WATERWAY				DIRECTION			DIRECTION					
DRAFT (FEET)	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL	SELF PROPELLED VESSELS			NON-SELF PROPELLED VESSELS		TOTAL
	PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER		PASSENGER AND DRY CARGO	TANKER	TOWBOAT OR TUGBOAT	DRY CARGO	TANKER	
ILLINOIS RIVER, ILL.				UPBOUND						DOWNBOUND		
9 - - - - -			1,691	7,021	2,083	10,795	3		1,654	9,014	970	12,041
8 - - - - -			925	1,291	349	2,565			929	1,234	141	2,304
7 - - - - -			521	67	33	621			525	100	13	638
6 - - - - -	1		236	624	53	914			257	45	16	318
5 - - - - -			30	76	4	110			39	16	4	59
4 - - - - -	228		7	16	4	255	228		8	11	50	297
3 - - - - -				4	19	23			1	14	115	134
2 - - - - -			1	6,742	642	7,385			1	5,530	1,840	7,371
1 - - - - -				686	26	712				160	116	276
AND LESS - - - - -			10			10			8			8
TOTAL - - - - -	229		3,421	16,527	3,213	23,390	231		3,422	16,528	3,265	23,446

<b>A</b>		<b>F</b>	
Alabaster, Mich. ....	50, 77	Fairport Harbor, Ohio .....	55, 79
Algoma Harbor, Wis. ....	49, 75	Frankfort Harbor, Mich. ....	49, 76
Algonac, Mich. ....	49, 75	Freight Tons Carried on Great Lakes by Areas -	XIII
Alpena Harbor, Mich. ....	33, 72		
Ashland Harbor, Wis. ....	5, 65	<b>G</b>	
Ashtabula Harbor, Ohio .....	56, 79	Gary Harbor, Ind. ....	21, 68
Au Sable Harbor and River		Gladstone Harbor, Mich. ....	49, 76
(Oscoda), Mich. ....	49, 75	Grand Haven Harbor and Grand River,	
		Mich. ....	28, 71
<b>B</b>		Grand Marais Harbor (Harbor of Refuge),	
Barcelona Harbor, N. Y. ....	60, 80	Mich. ....	49, 76
Bayfield Harbor, Wis. ....	5, 65	Grand Marais Harbor, Minn. ....	5, 65
Beaver Bay Harbor, Minn. ....	5, 65	Grand Traverse Bay Harbor .....	49, 76
Big Bay Harbor, Mich. ....	49, 75	Grays Reef Passage, Mich. ....	26, 70
Black River Harbor, Mich. ....	49, 75	Great Sodus Bay Harbor, N. Y. ....	60, 80
Buffalo, N. Y., Port of .....	58, 80	Green Bay Harbor, Wis. ....	32, 72
Buffalo Harbor, N. Y. ....	57, 79		
Niagara River, N. Y. ....	60, 80	<b>H</b>	
Tonawanda Harbor, N. Y. ....	60, 81	Harbor Beach (Harbor of Refuge),	
Buffington Harbor, Ind. ....	21, 67	Mich. ....	49, 76
Burns Waterway Harbor, Ind. ....	19, 67	Harrisville Harbor, Mich. ....	49, 76
		Holland Harbor, Mich. ....	29, 71
<b>C</b>		Huron Harbor, Ohio .....	53, 78
Calcite, Mich. ....	50, 77		
Calumet Harbor and River, Ill. and Ind. ....	11, 66	<b>I</b>	
Calumet-Sag Channel, Ill. ....	9, 66	Illinois River, Ill. ....	61, 82
Cape Vincent Harbor, N. Y. ....	60, 80	Illinois Waterway, Ill. (Consolidated-	
Caseville, Mich. ....	49, 75	entire Waterways) .....	16
Cedar River Harbor, Mich. ....	49, 75	Calumet-Sag Channel, Ill. ....	9, 66
Channels in Lake St. Clair, Mich. ....	38, 73	Chicago River (South Branch), Ill. ....	7, 66
Charlevoix Harbor, Mich. ....	49, 75	Chicago Sanitary and Ship Canal, Ill. ....	8, 66
Cheboygan Harbor, Mich. ....	49, 75	Illinois River, Ill. ....	61, 82
Chicago Area, Summary of Traffic .....	16	Indiana Harbor, Ind. ....	18, 67
Chicago Harbor, Ill. ....	21, 67	Introduction .....	VII
Chicago, Ill., Port of .....	14		
Calumet Harbor and River, Ill. and Ind. ....	11, 66	<b>K</b>	
Calumet-Sag Channel, Ill. ....	9, 66	Kelleys Island, Ohio .....	60, 80
Chicago Harbor, Ill. ....	21, 68	Kenosha Harbor, Wis. ....	49, 76
Chicago River (Main and North		Kewaunee Harbor, Wis. ....	32, 72
Branch), Ill. ....	6, 66	Keweenaw Waterway, Mich. ....	49, 76
Chicago River (South Branch), Ill. ....	7, 66	Knife River Harbor, Minn. ....	5, 65
Chicago Sanitary and Ship Canal, Ill. ....	8, 66		
Lake Calumet, Ill. ....	10, 66	<b>L</b>	
Chicago River (Main and North Branch),		Lac La Belle Harbor, Mich. ....	49, 76
Ill. ....	6, 66	Lake Calumet, Ill. ....	10, 66
Chicago River (South Branch), Ill. ....	7, 66	Lake St. Clair, Channels in, Mich. ....	38, 73
Chicago Sanitary and Ship Canal, Ill. ....	8, 66	La Pointe Harbor, Wis. ....	5, 65
Chippewa Harbor (Isle Royale), Mich. ....	5, 65		
Cleveland Harbor, Ohio .....	54, 78		
Commodity Classification .....	IX		

N	
New Buffalo Harbor, Mich. ....	50, 76
Niagara Falls, N. Y. ....	60, 80
Niagara River, N. Y. ....	60, 80

O	
Oconto Harbor, Wis. ....	50, 76
Ogdenburg Harbor, N. Y. ....	60, 80
Ontonagon Harbor, Mich. ....	22, 69
Oswego Harbor, N. Y. ....	58, 80

P	
Pensaukee Harbor, Wis. ....	50, 76
Pentwater Harbor, Mich. ....	50, 76
Port Clinton Harbor, Ohio ....	60, 80
Port Clinton, Mich. ....	51, 77
Port Gypsum, Mich. ....	51, 77
Port Huron, Mich. ....	37, 73
Port Inland, Mich. ....	51, 77
Port of Buffalo, N. Y. ....	58, 80
Port of Chicago, Ill. ....	14
Port of Detroit, Mich. ....	46, 75
Port Sanilac Harbor, Mich. ....	50, 76
Port Washington Harbor, Wis. ....	31, 71
Port Wing Harbor, Wis. ....	5, 65
Presque Isle Harbor, Mich. ....	22, 69
Put-In-Bay Harbor, Ohio ....	50, 76

R	
Racine Harbor, Wis. ....	50, 76
Rochester (Charlton) Harbor, N. Y. ....	60, 80
Rogers City, Mich. ....	50, 77
Rouge River, Mich. ....	44, 74

S	
Sackets Harbor, N. Y. ....	60, 80
Saginaw River, Mich. ....	34, 72
St. Clair, Mich. ....	37, 73
St. Clair River, Mich. ....	34, 73
St. James (Beaver Island), Mich. ....	50, 77
St. Joseph Harbor, Mich. ....	29, 71
St. Marys Fall Canal, Mich. and Ont. ....	24, 69
St. Marys River, Mich. ....	23, 69
Sandusky Harbor, Ohio ....	53, 78

S	
Saugatuck Harbor and Kalamazoo River, Mich. ....	50, 77
Sault Ste. Marie, Mich. ....	50, 77
Sebewaing Mich. ....	50, 77
Sheboygan Harbor, Wis. ....	31, 72
Silver Bay, Minn. ....	5, 65
South Haven Harbor, Mich. ....	50, 77
Stoneport, Mich. ....	51, 77
Sturgeon Bay and Lake Michigan Ship Canal, Wis. ....	33, 72
Summary of Great Lakes Traffic	
Freight Tons by Area ....	XIII
Freight Tons by Commodity ....	XIV
Ton-Miles by Area ....	XII

T	
Taconite Harbor, Minn. ....	5, 65
Toledo Harbor, Ohio ....	52, 78
Tonnawanda Harbor, N. Y. ....	60, 80
Ton Mileage of Freight Carried on Great Lakes ....	XII
Traverse City Harbor, Mich. ....	27, 70
Trenton, Mich. ....	46, 74
Two Harbors (Agate Bay), Minn. ....	3, 65
Two Rivers Harbor, Wis. ....	50, 77

V	
Vermilion Harbor, Ohio ....	60, 80

W	
Waddington Harbor, N. Y. ....	60, 81
Warroad Harbor, Minn. ....	5, 65
Waukegan Harbor, Ill. ....	6, 66
White Lake Harbor, Mich. ....	50, 77
Whitefish Point Harbor, Mich. ....	50, 77
Wyandotte, Mich. ....	50, 77